The Morton Lecture

ON

CANCER AND CANCEROUS DISEASES.

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BY SIR JAMES PAGET, BART., F.R.C.S.

MR. PRESIDENT AND GENTLEMEN,—We may safely believe that Mr. Morton, in generously founding this lectureship, entertained the hope that it might lead to some distinct practical utility, perhaps even to the finding of a method for either the prevention or the cure of cancer and cancerous diseases. I hardly need say that we have none yet. Where or how may we hope to find one? We are bound to search everywhere and in all ways; but in one lecture I can speak of only one way, and it shall be that which seems to me the most hopeful. I think that we may justly hope to find a remedy in the constant careful study of the likeness of these diseases to others of which we already have means of useful treatment. We may be the more hopeful because the nearest likenesses of cancer and cancerous diseases are to two other groups of diseases concerning which there have been, in recent times, very useful additions to our knowledge. In one direction we have their likeness to the simple or innocent tumours, in the surgical removal of which the risk of life has been diminished, even while the range of operating has been increased; and in the other direction we have their likeness, which I believe to be much more intimate, to some of the specific and micro-parasitic diseases, a group in which there has been progress towards both preventive and remedial treatment. It is of this last relation that I propose especially to speak; and I shall try to show that it indicates the method in which cancer and cancerous diseases should be studied more thoroughly than they usually are.

Let me say that I purposely speak of "groups" of diseases. I would not attempt to define what shall be called tumours, whether innocent or cancerous, or what diseases shall be called specific. I would rather undertake, if it were necessary, to show the inaccuracy or insufficiency of any definition yet given. Definitions, if they are to be more than convenient helps to arrangements, belong only to sciences more exact than pathology can yet be. It is better, at present, to think of diseases as in groups with borders that are not clearly marked: or as of nations with ill-defined frontiers, and with inhabitants intermingling and even intermarrying. We may find typical examples of diseases as of peoples; it will be from such examples that I shall take my illustrations; and these typical examples we may describe and may call them by distinct names; and these names are convenient for nomenclatures and for registration, for indexes and catalogues; but we must use them very cautiously in the real study of pathology.

Cancer and cancerous diseases agree with the simple or innocent tumours, such as the fatty tumours and overgrowths, the fibrous and fibroid, the simply cartilaginous, and the like, in that they are all growths, structures growing with some degree of likeness to the natural structures of the body, especially of the part in which they are placed, but growing as if with a self-possessed power of maintaining and increasing themselves. With all tumours alike, this growing is so far dependent on external conditions as is that of the natural structures; but it is not, as theirs is, in evident adjustment to the plan of other parts, and is not subject to the general control which in health keeps each part in useful association and concurrence with every other.

This peculiar method of growing, purposeless, and, as one may say, selfish, is characteristic of both innocent and cancerous tumours, and it seems to indicate a very close affinity between them. It is rarely seen in any other disease than these, and some specific diseases to which I shall again refer. It is in some measure imitated in the cheloid growths of scars, and in the excessive callus sometimes formed in the repair of fractures; but these usually after some time cease to grow, even though they may show no sign of dying or degeneracy.

Another indication of the relation between the innocent tumours and the cancerous appears in that it is impossible to mark any fair boundary line between them. Between such as may be deemed typical examples of each—say a common fatty tumour and a cancer of the rectum or of the tongue—there seems no likeness, except that they all grow after the manner I have spoken of. In all the rest of their life-histories it would be hard to find two diseases more unlike, and yet the space between them and between all the innocent tumours and the cancers is filled with examples of intermediate forms; with sarcomata in all degrees of structural likeness to the one or the other, and with less or more of the characters of malignancy, the degree of malignancy usually corresponding with the degree of unlikeness to the natural structures. But this gradation is, as I have said, only what we find in all groups of diseases; and if, on the one side, we cannot exactly define innocent tumours from cancerous, so, on the other, we cannot define them from the many forms of mere overgrowths which are not distinctly purposive, such as fatty growths about the neck, enlarged prostates, thyroid glands, and the like.

The resemblances between the innocent tumours and the cancerous may seem to indicate so close relation that they ought to be regarded as of essentially the same nature. But I believe that an unlikeness indicating differences yet more essential may be observed in them, and it is expressed in our calling them severally innocent and malignant growths. Malignant is nearly synonymous with cancerous; and though the name is sometimes treated with disrespect, as being figurative and without scientific meaning, yet as an expression of certain qualities shown in the method and course of the diseases to which it is applied it is neither unfit, nor, I think, unmeaning. For the qualities which the name "malignant" indicates are far more distinctive, more surely diagnostic, of this group of diseases, than are the minute structure and chemical composition of the diseased parts, or even than the method of their growing; and in this is an example of what we must hold in the study of all diseases, for pathology is a part of biology, and not derived chiefly from the study of anatomy and chemistry.

The life-history of diseased parts and growths; the shapes that they assume; their construction; their changes as they grow, develop, or decay; the modes in which they extend, or ulcerate, or die; their products; their influence on adjacent and on distant parts, and on the whole economy—all these things, in so far as they are not dependent on evident structure and locality, are true signs of essential variation of material composition. They are the signs of the very nature of the diseases in which we observe them.

It is thus with morbid as it is with natural structures, and, indeed, with all living organisms. The characteristic shape, construction, and manner of life and work of each species, or even of each individual, indicate natural qualities and affinities more specific, and of which the manifestations during life are more distinctive, than are any others that we can discern. I would, therefore, not discard the name "malignant." It tells with emphasis, yet not falsely or with exaggeration, the general biological character of the whole group of cancers and cancerous diseases, and it may keep us in mind that it is by these biological characters more than by the histological or the chemical, so far as these can as yet be discovered, that their affinities to the innocent tumours on the one side and to the specific diseases on the other, may be judged.

In indicating the relations between the cancers and cancerous diseases and the specific diseases, I shall assume, as I did more than thirty years ago, when I was lecturing here on this same subject, that we usually mean by specific diseases those in each of which the phenomena of common diseases—that is, of such as might be produced by various injuries or external irritations in any healthy person—are modified in some constant and definite manner which gives them what we call specific characters. Every year's study since that time has made it more probable that what was then scarcely more than theory is now a sure general truth—namely, that each specific disease is due to the influence of a distinct morbid substance on some part or parts at which the characteristic signs of the disease can be and are manifested. Two conditions must coincide in each: the one general or

diffused in morbid material in the blood; the other local, in some part with which this material produces disease.

I use this vague term "morbid substance" on purpose that I may not pretend to definition or exact description. The reasons are, indeed, constantly increasing for the belief that each of many specific diseases is due to morbid changes produced directly or indirectly by a distinct species of minute parasite, a microbe, a bacillus, or some other vegetable of lowest organisation, yet specific—as specific as any of the species much more highly organised. I believe that micro-parasites, or substances produced by them, will some day be found in essential relation with cancers and cancerous diseases. Mr. Ballance and Mr. Shattock have, indeed, lately failed to find any; and if, in such a question as this, negative evidence could prove a negative, certainly theirs might make us hopeless. I would not be so, especially if workers so earnest and so skilful as they are will continue the search; but for the present it will be best to use such terms as morbid material, virus, or specific material, which, I think, we may be sure are at least not erroneous.

The specific diseases which we believe and generally know to depend on morbid materials in the blood are very numerous—the eruptive fevers, many of the diseases of the skin, tetanus, hydrophobia, ague, and many more. They may be vaguely arranged in groups, each of which may include those which are most nearly alike; and the group by which the conformity of cancers and cancerous diseases may be tested is one that includes, as its chief members, syphilis, tuberculosis, glanders, leprosy, and actinomycosis, each of which is known to have a distinct micro-parasite. Let me point out their most important general agreements. And, first, let it be observed that they are included by Virchow among tumours, under the name of granulomata; and I doubt whether they can be justly excluded from the list for any reasons which would not equally justify the exclusion of many of the cancerous diseases. Certainly, a tuberculous mass such as one may find in the brain, or a syphilitic gumma in a muscle, or, still more, an actinomycosis in the jaw, has more of the general characters of a tumour than any rodent ulcer has, or many cancers of the lip or tongue. It is at least evident that all these specific micro-parasitic diseases are, in their several measures and in some of their forms, morbid growths and self-maintaining. All agree in this general character; they differ from one another in that each has a definite, characteristic, and diagnostic method of growing, as shown in its shape and in its substance, both tangible and microscopic, and in its relations to the structures which it involves. In these respects they differ from one another about as much as any of them do from cancer.

Besides, in all these diseases, as in the cancerous, the morbid growths are prone to special modes of degeneration, of partial decay, and of death; and then they all tend to ulceration, each with a characteristic method, shown in the shape of the ulcer, the structure of its boundaries, and its mode of affecting the parts on which it encroaches.

And all the cancerous and the others alike are at some time infective; some by inoculation, all by invasion of adjacent parts, or by the transmission of materials, through lymph-spaces, lymphatics, or bloodvessels, to parts far off.

Now I venture to hold that likeness in characters so significant as these is evidence enough of essential likeness and of close affinity in all the diseases in which they are observed; and, therefore, that as we know that in tuberculosis, syphilis, leprosy, and the rest, there is for each a specific morbid material in the blood, so we should believe that there is at least one in cancer and cancerous diseases. The fact that it has not yet been found is not sufficient to prove that it does not exist.

We should observe here the same rule as we do in other groups of specific diseases. For example, among specific fevers, so-called, there is a similar general likeness, and they are regarded as a separate group or genus, call it what we will; and in this group there are many different fevers, each of which, though in many things like the others, has special and diagnostic characters, chiefly in the places, whether skin or glands or any others, in which it shows its local characters. Of many of these fevers, we know that each is associated with a different morbid material in the blood, a micro-parasite or whatever it may be; of the rest, we do not know this, but we do not doubt it; we are as sure of it as of anything in pathology not certainly known. So may we be, I think, that cancer and cancerous diseases are specific in the same sense as are those other diseases to which I have shown their general likeness. There are some unlikenesses between them: cancer cannot be inoculated, it is not contagious; but these are negative. I believe that there are no positive generic unlikenesses; and as to the differences among them, the diseases that are certainly specific do not differ more from cancer than they do from one another.

Let me note also one more likeness among all these diseases—namely, that, as we see them in practice, we cannot but observe degrees of conformity to what may be regarded as the typical forms of each. Just as I said that there are all degrees of transition from the innocent tumours to the cancerous, and to the mere overgrowths that are hardly abnormal, so are there all degrees of less or more malignancy. And, similarly, we may trace all gradations from the typical tuberculosis, through the less or more of scrofula, to what some call mere delicacy of health; or we may trace syphilis till we doubt its existence, or guess at it in some combination with scrofula or gout.

But now that I may illustrate the influence of different kinds of virus in the production of morbid growths, let me point to some of those occurring in plants.

The whole study of tumours may, indeed, find admirable illustration in vegetable pathology. For example, I think that some of the best evidences, even nearly the proofs, of the truth of Cohnheim's explanation of the origin of tumours, at least of the innocent ones, from portions of germinal tissue remaining undeveloped, may be seen in some of the xylomata or woody tumours which may be found on trees, especially on beeches and cedar-trees; for in these it is often evident, and always probable, that they have grown from buds, or "sleeping eyes," as they have been called, which have remained for a time dormant, inactive, enclosed within normal structures, and then have, as it were, awakened and grown, after a manner of their own, with good woody tissue, but separate and purposeless. Our museum has specimens of such tumours—oval or nearly spherical masses of hard wood, well defined, concentrically laminated, either lying just beneath the bark of the branch or trunk in which they have grown, or nearly separated and cast out. Some of them, like polypi or exostoses, have pedicles continuous with the proper wood of the tree, and some have little outstanding twigs or branchlets, outgrowths from the buds in which they themselves had their origin.

And if these and the vast number of growths of the same kind observed in plants may illustrate the apparently spontaneous production of the innocent tumours from germinal structures delayed in their development, so may galls illustrate the influence of a virus in exciting morbid growths. They may, indeed, illustrate both the conditions requisite for the manifestation of a specific disease—the specific morbid material and the part appropriate to its morbid influence.

Of these galls, which may fairly be called heterologous growths, as the xylomata may be called homologous, there are more than a thousand forms already known, and each form is produced by a different material, a different specific virus, as we may safely call it, inserted by a different species of insect in a leaf or some other part of a plant. The very nature of the virus which is usually inserted with the insect's egg is, I think, unknown; but so constant are its properties, and so exactly defined, that the specific characters of each insect are not more invariable than are those of the galls which it has made to grow. As we may describe the specific characters of each insect, so may we those of its appropriate gall; and so may we, therefore, speak of each form of gall as due to a specific virus. This is especially seen when different kinds of virus are inserted in similar textures, as when one finds three or four different galls produced by as many different insects on the same leaf.

The oak leaves which I have here show these facts well. I am indebted for them to Mr. Rolfe, of the Royal Gardens at Kew. Here are, as he has written, ten branchlets of the common oak, and their leaves bear, altogether, ten different forms of galls produced by ten species of insects; two, three, or four forms being on each leaf.

The only variation shown is in some spangle-galls formed on the leaf of a variety of the common oak, which are distinguished by their purple colour, but not by any apparent difference of structure.

Many of the galls are small, and may seem to you comparable with mere pustules formed of little more than disturbed natural structures; but they are not so; they are all outgrowths, in evident continuity with the natural

structures, yet different from them—often very different. All this is more plainly seen in the larger kinds of gall, each with its well-defined characteristic shape and construction, and its minute structures differing from the healthy structures with which they are continuous as widely as do cancerous structures from those of the parts in which they grow. And it may be observed that in all, whether small or large, the specific differences are marked by shape and pattern and other large characters more than they are by any minute structures as yet discerned.

I will not be tempted to go further in this intensely interesting field of pathology. I wish I could provoke some to pursue it, some who would study it pathologically with the same care and skill as Mr. Rolfe and others have studied it, as a part of natural history. It must suffice now to have shown in it how certainly each of a large number of morbid growths, each as heterologous, each as specific as that seen in any cancer or cancerous disease, is produced by the influence of an appropriate specific virus.

There is, however, one point more which I must mention, for it may help to show that even a well-defined virus can produce its appropriate disease only in some exactly appropriate place or texture. Each insect, with an instinct as unfailing as any natural law, deposits its egg and its virus in the leaf or other part of the very plant in which the right kind of gall can be formed. Each virus requires, as we may say, a susceptible and fitting place and substance; and this is a fact confirming what we believe in the case of many specific diseases, and, as I venture to say, in the cancerous. The two conditions must coexist—the specific material, microbe, virus, or whatever we may name it—in the blood, which will carry it to every part, and the one appropriate part, texture, or place in which this material can produce the disease.

Now this part may be so small or so ill-defined, it may seem so absolutely limited, as to give to the cancer when first found an appearance of being a merely local, a wholly local, disease; especially as the general health may be undisturbed. It may be called local in the sense that it is the only one locality in which it can be formed, but the analogy of the specific diseases gives reasons for believing that it would not have occurred in this place unless there were a specific material in the blood, which was carried to it; even as a gall would not form without the insect's puncture. And the like is evident in many specific diseases in which the presence of a morbid material in the blood is most certain.

For example, tetanus is due to a well-ascertained bacillus, and in the blood this, or some material produced by it, is carried to every part; but it seems harmless to all till, after, it may be, some considerable time, it affects some portion of the spinal marrow.

In hydrophobia there is a specific virus, inoculable, probably a microbe; it is everywhere diffused in the person or animal in whom it has been inserted; it is in the saliva, and, it is said, may pass even to the fœtus in a pregnant woman, or the milk of one suckling; and thus it may be during a period of good health, but at last it produces definite disease at the appropriate nervous centre.

In the sequelæ of fevers, where we cannot reasonably doubt that morbid materials remain in the blood, it is only in certain parts that diseases may be manifested. Thus, after scarlet fever it may be only in the tympanum or the lymph glands; or, after typhoid fever, in some cases only, in portions of the periosteum; in others, only in a testicle or in a small portion of one vein, or of the spinal marrow. These last are, indeed, very illustrative cases. After all the signs of typhoid fever have passed away, when the convalescence is established and all the waste and damage of the disease are being repaired—while thus, in respect of general nutrition, the health might be deemed above its average, we may find an acute inflammation of one portion of the periosteum of one bone. It is surely an evidence that that one portion was the only portion of the body in and with which the something in the blood could generate disease. It seems the more evident in the fact that sometimes the periostitis has appeared symmetrically on both the tibiæ. The two portions of periosteum symmetrically placed were identical in composition, as symmetrical pieces of the body often are; therefore both were similarly disturbed; no other part being exactly like them, no other was disturbed. In all the body nothing was susceptible of the disease except these two pieces.

Such facts as these deserve very thoughtful study, as evidences of the exceeding fineness of the differences among different parts of what seems to us the same structure. If a diseased process—say a syphilitic eruption—is evident on one portion of skin and not on another, it is an evidence that these two portions are not exactly alike. Whether the difference be in structure, or in composition, or in relation to the nerve force it may not be possible to tell; but there is a difference; they are not exactly alike, though they may appear so to every test but those of disease. The evidence is of the same kind as that by which a chemical test determines the difference of two solutions; only the test in pathology is far more delicate.

Now these considerations have a definite bearing on the question of localisation of cancer. There may be the appearances of perfect health; some have even thought that cancer is due to a kind of overflow of health; and, certainly, there is no greater fallacy than to think that, in its early stages, it is indicated by a cachexia; yet, with all this general health, the specific morbid material may be in the blood. If there be in the body a part, however small, which is susceptible of cancer, this may become cancerous; but we may fully believe that, if this one part had been as insusceptible as all the rest, the morbid material would have remained in the blood harmless and unobserved. Such things are sure in some of the specific diseases. Syphilis may reappear after years in which no sign of it could be found; or malarial fever may be for years dormant, till, with some accidental disturbance of the health, it may be renewed with its specific characters unchanged. In both cases we must believe that some morbid material remained inactive and apparently harmless in the body.

In a large number of instances we have, I think, no knowledge of the reason why the evidences of any specific diseases naturally appear in one part of the body rather than another; no knowledge of the reasons for the different powers of resistance or self-maintenance in different parts. We cannot tell why small-pox is especially manifested at the skin, or typhoid fever in Peyer's follicles, or tertiary syphilis in a piece of periosteum or muscle. But in all specific diseases, and in cancers more than in any, parts are rendered apt to become the seats of diseases after injury, or in degeneracies, especially those produced by long-continued irritation. Thus cancer increases in frequency with the advance of age and of senile degeneration. Its frequency in the breasts and the uterus before old age coincides with what may be deemed their early senile changes, when they cease to be capable of their proper purposes. So, too, all cancerous diseases are apt to form in parts congenitally defective; and still more they follow injuries, sometimes very quickly. More commonly still they appear in parts that have long been the seats of some "irritation," as we call it, as in the scars of burns, or in syphilitic tongues or gums, or cheeks irritated by bad teeth, or in lips irritated by pipes, or tongues by hot tobacco smoke. Similar to these are the soot cancers, and the petroleum cancers, and those of the abdomen and thigh, which are seen in Cashmir, in consequence of wearing a hot brasier over these parts.

Now, all these facts have led to our speaking of parts "becoming cancerous," and the term has, I think, been by some taken as implying that the beginning of a cancer is altogether local, and that the textures of a part may, as it were, of themselves, or through some common irritation or degeneracy, or in the course of syphilis or other diseases, change themselves and become cancerous—change, that is, their whole nature and mode of life from that which is common to that which is specific, or from one specific method to another. But this is far from being a fair deduction from the facts; for all these irritations and degeneracies are in many persons ineffective, and the facts observed are quite consistent with the much more probable belief that these degenerative changes only make the parts less able to maintain themselves, less able to resist the invasion of any morbid material in the blood which is brought into contact with them.

Here is, indeed, another likeness of cancer and cancerous diseases to the chief specific diseases. An injured part may become the seat of syphilitic disease, but this can be only in a syphilitic person; or of tuberculous disease, but only in a tuberculous person; or of gout in one gouty; and even small-pox may be confluent at an injured part, though discrete at every other. Thus, in diseases recognised as specific, in those that certainly have a specific morbid material in the blood, we recognise a local injury or irritation as making a part susceptible, or apt for the manifestation of the specific morbid changes. So should we think

when cancerous disease appears in such an injured or irritated part; and if we are to speak of such parts as becoming cancerous, it should only be with the understanding that they are becoming likely to be the seats of cancer if there be the other conditions required for that disease.

Really, to suppose that any previously healthy part could of itself, or in direct consequence of any ordinary change affecting it alone, so definitely alter its method of life, its shape and structure, its manner of growing and degenerating, as to become cancerous; and, still further, to suppose that all parts, however unlike in health, could change themselves into likeness as cancers—all this would be to assume more than can be matched in all the range of sure pathology or of natural history.

And the difficulty is not diminished by observing that the change is wrought in embryo structures. Embryo cells or protoplasms can no more of themselves change their destination, or by any common force be driven further from it, than any complete structures can. In so far as the destiny of germs and other embryo structures is not absolutely determined by inheritance, it is determined by their environment; they may be assimilated by force of the structures next or near them, and if these structures be cancerous the embryo structures may become cancerous; but to assume that such shapes and modes of life as we see in the tuberculous, the leprous, or the cancerous diseases, can be self-assumed by embryo structures or by protoplasms, is scarcely less than to assume that an embryo gland might of itself change its destiny; so that an embryo liver might become a lung.

I could, indeed, imagine that in the hereditary transmission of cancer there might be transmitted such a tendency to likeness to that part of a parent or ancestor which was cancerous, that the same part in the offspring might, as of itself, become cancerous; but even if this were sure, it would not explain the numerous cases in which the cancer in the offspring is not in the same part as it was in the progenitor, or those in which many members of one family have cancer in many different parts. To explain these we need to assume that there was transmitted a tendency to the production of the cancerous material in the blood; indeed, it would be hard and unfair to think that one tendency would be transmitted without the other. If both are transmitted, we may well suppose that cancer would form somewhere; but really one can be only guessing at questions such as these.

The fact of frequent inheritance is sure in this as in many other diseases, but its method is so mysterious; it is so utterly impossible to conceive the form or the material in which the impregnated ovum contains that which will become or be made cancerous, that it cannot be safe or useful to think that we can deduce anything from the bare fact. We are apt to speak of potentiality, tendency, and predisposition as if they were forces independent of matter or of structure; but when we try to think of the very things on which they depend, we find ourselves in a cloud-land of mystery, where the difficulty of discovering truth is as great as the facility of guessing.

I have limited myself to the pathology of primary cancer and cancerous diseases, and I shall not go far beyond it; for nearly all that happens in the history of secondary—or, as they are now wrongly called, metastatic—cancers, or of some that recur after operations, might happen as consequences of that which was at first an entirely local disease. If we could believe a primary cancer to be formed by any part in and of itself, then it would be easy to believe that this cancer would infect adjacent structures, and that materials would be carried from it in the lymphatics and the bloodvessels, and would grow and multiply in distant parts, and in them be centres for yet further infections.

But I hope that I have shown reasons enough for believing that primary cancerous growths are not merely local diseases, but require for their production at least the two conditions that I have spoken of. Once formed, the secondary diseases and much of all that follows, even to the inevitable end, may be due to transference of cancerous materials from the primary growths. But I do not think that all the secondary and yet later events can be thus explained. We have no reason for believing that the morbid material in the blood is always exhausted in the formation of the primary cancer, and it seems more probable that in some form this material remains or is renewed, and that to this, as well as to transference from the primary disease, the secondary and later changes are to be ascribed. I believe there are facts in the history of secondary cancers which cannot be explained by the merely mechanical process of penetration or of embolism. There are often evidences of other than mechanical relations between the primary and secondary. The organs that are most frequently the seats of primary cancer are very rarely the seats of secondary. The uterus seldom becomes cancerous in one who has cancer of the breast; still more rarely does the breast become cancerous as secondary to the uterus; and I suppose no one ever saw two cases of cancer of the face or lip or any part of the digestive canal following cancer of the tongue. Then there are the well-known cases of cancer of the thyroid, in which the secondary disease affects, as if by selection, the bones more often than any other part. And my son has gathered facts from the records of great numbers of cases of cancer which seem to indicate that the relations between the primary and the secondary seats of cancer may be compared with those which he found between the primary and secondary seats of suppuration in pyæmia. Certainly, some of those relations—such, for example, as that between the peritoneal and pelvic organs and the parotid gland—could not be explained by any mechanical embolism. Similar relations, I think, will be found between the primary and the secondary and later seats of cancer.

But I shall not discuss these questions; the main interest of the whole subject is in the biology of the primary cancer or cancerous diseases, and I hope I shall be deemed to have shown that in this, as in all the other characters of which I have spoken, there is so great likeness and so little unlikeness between these diseases and the specific ones with which I have compared them, that we may expect equal likeness in respect of the material on which they essentially depend. If it be so, then we may justly hope that by careful study, both clinical and experimental, we may find the morbid material, microbe, or ptomaine, or one or more of their products to which cancer is due. And if this be attained, then may we hope to be much nearer to a remedy, preventive or curative.

It would be easy to ask questions which this theory of the specific nature of cancer could not yet safely answer; to raise doubts which might seem to show it to be erroneous or insufficient. It may be asked, Why, then, is cancer not inoculable? Whence does its micro-parasite come? Why cannot it be found? Can one micro-parasite produce such various forms of disease? Where, in the unbroken series between innocent tumours and cancers, does the parasitic influence come in? I could not answer these questions. I could ask many more just like them; but I can remember that when I last lectured here on this subject, if similar questions had been asked concerning tuberculosis, leprosy, tetanus, or many other diseases now known to be dependent on parasitic or other specific materials in the blood, they could not have been answered; or, most probably, those which would then have been answered "No" would now be more correctly answered "Yes."

And now it may be asked, if all these things be in due time proved, what will the practical utility be; what the better treatment of cancer? I cannot tell. I promised only to suggest how best we might try to find out, and at least we may hope for more than is gained by the merely local operative treatment.

I should have tried to deal with this, but that the whole subject is so thoroughly and so admirably treated by my friend and former pupil, Mr. Butlin, in his recently published work on the "Operative Surgery of Malignant Disease," that I could not even in many lectures have taught so much as he does; but it is clear that, great as is the good that operative surgery may do when practised with the prudence which he urges, it does not do all we want; the disease returns even after complete removal of the diseased parts. All that is locally wrong may be removed, the local portion of the disease may be deemed cured, but something remains, or after a time is renewed, and similar disease reappears, and, in some form or degree, is usually worse than the first, and always tending towards death. It is true that, in less measure, the like of this may be observed in some of the cases of specific diseases which appear medicinally cured. Ague may have been cured, as we say, with quinine, or syphilis with mercury, and for years no sign of either may have been observed, but sometimes one will reappear in its old form, or as modifying some other disease. Especially we may see this in persons who have suffered with ague, or any similar kind of

malarial fever, or even without suffering from it have been exposed to the malarial poison. They may have been in good health for any number of years, but the ordinary changes following any considerable operation may bring out some dormant material, and all the characteristic signs of the fever may for the first time appear, or may be renewed, and may be cured, as we say, with quinine.

Still, we might well be nearly content if we could find a medicine as efficient against cancer as mercury and quinine are against syphilis and ague, especially as the recurrences of these diseases are less, not more, severe than the primary. Such a one we have not. Can it be reasonably hoped for? Yes, and the more so if we may count cancer among the specific diseases, for it is of some of these that we most surely have remedies more nearly complete than we have of any other disease whatever. The name commonly used of specific medicines may tell this. There are none so definitely useful against diseases of any other kind; and, indeed, if we had to reckon cancer as a local disease, we should have to look for a different remedy for it in each locality.

But I can now only commend the study to my juniors. It must be both clinical and experimental, and probably the latter will be the more fruitful. If once the specific morbid material can be found, it may be dealt with as others generally like but specifically unlike it have been. But I will not guess how. I have tried to show by facts a right way to a good end: I will not now by guesses run the risk of pointing to a wrong one.

OBSERVATIONS ON THE

ANÆMIA OR CHLOROSIS OF GIRLS, OCCURRING MORE COMMONLY BETWEEN THE ADVENT OF MENSTRUATION AND THE CONSUMMATION OF WOMANHOOD.[1]

BY SIR ANDREW CLARK, BART., M.D., LL.D., F.R.S.,
ONE OF THE TEACHERS OF CLINICAL MEDICINE AT THE LONDON HOSPITAL, AND HONORARY FELLOW OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

EVERYONE experienced in the practice of medicine must have been often struck by the frequent occurrence of anæmia or chlorosis in girls between the ages of fourteen and twenty-four—that is, from about the time of the beginning of menstruation to about the time of the consummation of womanhood; and everyone acquainted with medical literature knows the great variety of names which has been given to this malady, the conflicts of opinions which have occurred respecting its nature, the confusion which reigns regarding its nosological position, and our complete and confessed ignorance of its causation. Many years ago, when studying the effects produced upon the body by the undue retention of the excretions and of the products of their decomposition, I came to the conclusion that this anæmia or chlorosis of girls was brought about for the most part by fæcal poisoning; and as the experience of later years has given increased probability to this view, I have at last ventured to submit it to the Society for discussion. As neither the time at my disposal nor the traditions of the Society will permit me to enter upon a historical and a critical consideration of my subject, I must confine my observations for the most part to the facts which constitute my personal experience, and to the more important reflections which they have naturally begotten.

The girl who is the subject of this anæmia, whilst often declaring herself perfectly well, looks extremely ill. Although very plump, she is very pallid. Her countenance has a wistful or a sad expression; the face is so puffed that its finer contour lines are effaced; the eyes are large and prominent, the conjunctivæ are white and watery, the pupils dilated, and the eyelids swollen; the lips are full, and of a pale purple colour; there is a slight varying flush upon the cheeks; the ears and neck have the hue of wax, and the hair is dry and thin. Although at first professing to be well, a slight cross-examination of the patient speedily elicits the fact that she complains of breathlessness and feelings of suffocation, of palpitations, noises in the ears, and throbbing headaches, of more or less constant pain in the left or in the right side, of languor or of malaise, and of frequent but fleeting storms of nervousness, irritability, and passion.

Passing to the objective and more methodical examination of a patient suffering from this form of anæmia, we shall find its presence manifested and characterised by the symptoms, which I proceed to enumerate. Beginning with the digestive system, one finds that the tongue, sometimes clean, is usually loaded at the base, indented at the sides, and watery; that the breath is tainted, and has on rare occasions even a fæcal odour; that the appetite is usually good, although capricious; that there are sensations of sinking between meals and of weight after food; that there is much intestinal flatulence of a disagreeable odour; that at one or other flexion of the colon, usually the left, there is more or less constant pain, extending to the back; that the bowels are either obstinately confined or inadequately relieved, and that the fæces, usually scanty, hard, dark, and lumpy, occasionally consist of showers of scybalous masses, embedded in an offensive mucus swarming with bacteria. Here I must pause for a moment to notice at further length two of the symptoms just enumerated as connected with the deranged digestive organs of anæmic girls.

In reply to questions concerning the action of the bowels, it is often said—and said accurately—that they are relieved daily, and it is often added, but added quite inaccurately, that in that respect there is nothing wrong. For it is quite certain that a daily relief may be an inadequate relief, and that with a regular feculent discharge there may be also a regular feculent accumulation. And in anæmic girls of the class of which I am speaking, I feel as sure as I can well be about anything of this character that inadequate feculent relief, or, in other words, feculent retention, is not only the rule, but the characteristic sign. To this point, however, I shall again advert at the close of my observations.

The second symptom which, occurring in anæmic girls, I wish to notice at further length, is the pain more or less constantly felt in the region of one or other of the right or left flexures of the colon. Occurring most commonly in the left hypochondrium, and rarely absent, the most diverse explanations have been offered of its seat and nature. For my own part, I have become convinced, both by the descriptions of patients and by my own inquiries, that the colon is the seat of this trouble. Some patients are so sensitive that they feel the passage of matters along the transverse colon, and they will explain that sometimes, the passage being obstructed in the region of the left flexure, the obstruction is followed by an aggravation of the characteristic pain. Furthermore, when, for the relief of this pain, becoming at some time intolerable, an emetic of hot water is so administered by elevation of the patient's hips that it shall reach the transverse colon, the patient becomes conscious of the contact of the water with the painful part, and is also usually relieved.

The derangement of the genital organs occurring in the anæmia of girls has received an amount of consideration which neither the time and order of their development nor their intrinsic importance seems to me to warrant. In those disorders some writers find, or think that they find, the whole etiological relations of the disease. And Aitkin, indeed, defines chlorosis, the malady in question, as "that form of anæmia which occurs in the female at the period of puberty, and is to be classed among the functional diseases of the female organs of generation in the unimpregnated state."

One may sum up the genital disorders in chlorosis by saying that the menstrual period is usually regular; that the discharge is scanty, pale, and otherwise altered; that sometimes there is amenorrhœa; that on rare occasions the menstrual flow becomes excessive and irregular; and that almost always there is a leucorrhœal discharge. Now, for my own part, the more closely I have studied the time of the appearance of those disorders, the course which they follow, the effects which they produce, and the place which they occupy when found in other maladies, the less disposed do I become to regard them as the sufficient causal agencies in the evolution of this disease. On the contrary, I consider them to be secondary disorders, not primary results, not causes, and the outcome of antecedent and adequate conditions.

The condition of the urine, as far as it has been hitherto examined, teaches us but little. Usually it is copious, pale, acid, of low density, somewhat deficient in urea, uric acid,

[1] Read before the Medical Society of London on Monday, Nov. 14th.

and their congeners, occasionally albuminous, and always prone to speedy decomposition. Exceptionally, and this for the most part after the cessation of nerve storms, the urine is scanty, high-coloured, irritatingly acid, loaded with lithates and oxalates, and exhaling strongly urinous odour. The ordinary urine has always struck me as in several ways peculiar, and I suspect that when our chemistry of the ptomaines and leucomaines is further advanced we shall discover the cause of this peculiarity to be due to alkaloids absorbed from the alimentary canal and excreted through the kidneys.

The disorders of the blood and of the circulatory system developed in the course of this malady are numerous, varied, and important; and, together with the disorders referable to the nervous system, with which they interact, they constitute the characteristic signs of the disease.

Concerning the blood, it has been said by almost every writer of note in these days that there are but two essential changes: a little change, which is a paucity of blood discs; and a large change, which is an extreme penury of hæmoglobin. On these two changes, however effected, it is alleged that every alteration of tissue, every disorder of function, and every sign or symptom in this disease by which these alterations or disorders are manifested entirely depend. But I cannot accept this statement as either conclusive or complete. The clinical evidence of the existence of other changes in the blood is too clear and precise to admit of refutation. For example, as was first pointed out by Tuckwell of Oxford, a not inconsiderable percentage of chlorotic girls is subject to venous thromboses, and in at least one case of my own I have seen spontaneous clotting in the smallest arteries (inopexia).

Turning now to the symptoms of this anæmia as manifested through the circulatory organs, we find that the action of the heart, usually weak and regular, is sometimes tumultuous and irregular; that commonly a systolic bruit is heard within the pulmonary area; that rarely a bruit may be heard over any of the orifices, and even at the diastolic time; that the larger vessels are liable to attacks of local throbbings, and that slight compression of their walls elicits a systolic and sometimes also a diastolic murmur; that the pulse, varying in frequency, quickness, and force, is deficient in tension, and moderately full; that sometimes in circumscribed areas there are flashes of redness or of pallor; that now and then a finger, or a small tract of skin upon the body, will become suddenly blanched and remain in that condition for hours; that the venous system is flaccid; that one hears over the larger veins a continuous murmur of varying intensity like the buzzing of a fly; that the hand lightly laid upon the neck has conveyed to it a vibratory thrill; and that under emotional and other excitement the whole vascular system is capable of being roused into violent and perilous activity.

The blushing or blanching of organs which I have just adverted to, and which occurs in many different affections, is a subject of great clinical importance, and would justify separate and detailed consideration. But here, in reference to anæmia, I must content myself with saying that I have seen the blanching of a bit of skin followed by gangrene, and the blushing of kidneys followed by transitory albuminuria.

The respiratory disturbances in this anæmia are few, but strongly marked. The breathing, even in repose, is hurried, and it is painfully accelerated by emotion or exertion. The chest is always more or less oppressed; a dry cough is seldom absent; and sensations of suffocation are of frequent occurrence. Very rarely there is seen a little blood-stained mucous expectoration; and this, with a concurring dry, rustling character of the respiratory murmur, excites suspicions of approaching tuberculosis. But such suspicions are ill-grounded, for I have never seen the two affections—the chlorotic and the tubercular—concur in the same person.

In this malady the alterations of the skin are the most obvious. It is of the colour of long-kept white wax, lighter or darker at different parts; on the forehead it is of a greenish-white tint; on the temples and neck it is of a yellowish hue; about the lips and nostrils it is of a very pale purple colour; and about the eyelids it is like a withered autumn leaf. For the most part thick, dry, and cushiony, the skin is in some regions thin and soft and moist; in the axillæ and about the groins it is liable to profuse, and sometimes to rank, perspirations.

The nervous disorders characteristic of this chlorotic anæmia appear to be the results of an imperfectly nourished and constantly irritated nervous system. Its dominating conditions are an undue sensibility, irritability, excitability, instability, and debility. The patient suffers from a variety of disordered sensations, from sensations of heat or of cold, of numbness or of tingling, of loss of power or of internal spasms; and she complains of aches and pains, and weakness; of throbbing headaches, and of facial or pelvic neuralgias; of noises in the ears, and of disturbances of vision; of giddiness, and of disturbing dreams. But still more remarkable are the disorders manifested through perturbations of the higher nervous centres. At one time languid and indifferent, the patient at another time is interested and active. Sometimes capable of great temporary exertion, she is at other times exhausted by the slightest effort. Usually irresolute and capricious, she is occasionally obstinate and unreasonable. For the most part gentle and inoffensive, she now and then falls into a condition of insufferable irritability, or bursts into fits of uncontrollable passion. So variable is she in spirits that whilst to-day she may be sunk in the depths of despair, to-morrow she will be brimming over with mirth and laughter.

In view of this summary of the disorders accompanying the anæmia of girls, we must now proceed to inquire into the causes of the disease. As set forth by the chief writers of the time, they are of two sorts, the general and the special. The general causes are imperfect and improper food, deficient air, exercise, and light; overwork, especially of the brain; the dissipations of society; solitude and the absence of healthy amusements; disappointments and sorrows; secret impurities; digestive uterine and nervous disorders.

The alleged special causes of chlorosis are three in number. First, there is the theory of Virchow, which ascribes the malady to an imperfect development of the heart and larger arteries, associated with an original weakness of the formative power of the blood-cells. The second theory, advanced by Sée, explains the origin of the disease by the inability of the organism to meet the great reparative demands suddenly made upon it by the advents of menstruation and the concurrent increase of growth throughout the body. The third theory, proposed by Zander, ascribes the disease to the presence in the blood of unassimilable forms of iron, and alleges that this is owing to a deficiency in the organism of hydrochloric acid. It is held that by the use of this agent the iron is converted into assimilable forms, and that so the disease is cured.

It would be unprofitable to enter here into a critical consideration of these alleged causes of the malady under consideration, for the issue of judgment would surely be that they were inadequate to account for it. The malady occurs almost equally among the rich and the poor, among the generous livers and the plainly fed, among the cultured and the rude, among the idle and the occupied; and it seems to be independent of race or of nation, of climate or of soil, of mountains or of valleys, of seaside or of inland, and of country or of town.

Is, then, the problem of causation insoluble? I think not. And I even venture to express the opinion that if we submit to careful examination the conditions of life which accompany the appearance of this anæmia, we shall be able to discover in them violations of physiological laws common to every case, wherever found, and sufficient through the results of those violations to explain the essential characters of the disease. In the period between the advent of menstruation and the consummation of womanhood there arise physical, mental, and moral changes which greatly influence the girl's habits of life and thought. She becomes self-conscious, and enters into new relations with those whom she meets. She thinks of her appearance and tightens her waist. Afraid of getting fat, she stints herself in food, and eats of only dainty things. With her sense of modesty deepened, she is shy of being seen about the closet. Unprompted by nature, and perhaps disdainful of such affairs, she omits the daily solicitation of the bowels. And so at last it happens, through the compressed waist, the insufficient food, and the disregarded desire or the neglected trouble, that the bowels become either obstructed, confined, or inadequately relieved. In either case the fæces accumulate, are retained, and not only undergo changes in themselves, but provoke changes in the mucous membrane with which they are in contact. As one of the results of those changes, both chemical and biological, there are produced new substances, ptomaines and leucomaines, which are injurious to the organism, and which, absorbed into the blood, originate in girls of a nervous type of organisation those alterations of the constitution of

the blood which constitute the true pathogeny of this anæmia of girls.

Now, it is necessary to ask if this alleged cause of the malady is adequate to the explanation of it? Well, it has been shown by Bouchard, in his lectures on Self-intoxication in Disease, that the poisonous activity of human fæces, even in healthy men, is very great. And he concludes that there are formed throughout the intestines of an adult in twenty-four hours a quantity of alkaloids, which, if excretion were stopped and all were absorbed, would be sufficient to destroy life. It is, then, impossible to doubt that poisonous alkaloids are formed in the alimentary canal; that when excretion is seriously diminished they must be in some degree absorbed; and that, mixing with the blood and entering the tissues, they must produce some sort of injurious effects determined by the rate of absorption and the amount absorbed.

And here arises the crucial question of this communication, Can any sufficient collateral proof be given that fæcal retention is not only adequate to explain the phenomena of this disease, but also that it is the true cause of it? Yes, there can, through an exposition of the means of cure; for the treatment which most speedily and effectually cures this disease is a treatment which by the use of tonic aperients produces full and regularly recurring action of the bowels. With the suspension of this treatment the disease recurs; with its resumption the disease again subsides; and no treatment appears to be permanently successful which does not provide means for securing daily relief to the intestinal canal. What are the details of this treatment?

I shall answer this question best by giving *au naturel* the directions which I should prescribe for an ordinary patient. On first waking in the morning, sip a quarter of a pint of cold water. On rising, take a tepid sponge bath; dry quickly, and follow with a brisk towelling. Clothe warmly and loosely; see that there is no constriction of the body or of the limbs. Have four simple, but liberal, meals daily, arranged after this fashion: Breakfast, eight to nine—whole-meal bread and butter, with one or two eggs or some broiled fresh fish, or the wing of a cold chicken or pheasant, and towards the close of the meal half a pint of equal parts of milk and tea, not infused longer than five minutes. Lunch or dinner, one to two—fresh, tenderly-dressed meat, bread, potato, well-boiled green vegetable, and any sort of simple farinaceous pudding or of cooked fruit, preferably apple; drink one glass of Burgundy alone or in half a tumblerful of water. Tea from four to five—whole-meal bread and butter, with a cup of equal parts of tea and milk. Dinner or supper, from seven to eight—this should resemble the mid-day meal, but should be less in quantity. Nothing is to be taken after this meal, nothing between meals, and nothing but what is here set down. Walk at least half an hour twice daily, and as much more as strength and convenience will permit. Retire to bed about ten, and repeat the sponging and towelling. See that your bedroom is cool and well ventilated. Lead a simple, regular, active, occupied, purposive life; and do not notice or distrust yourself.

With such instructions modified according to individual peculiarities, I prescribe an old-fashioned ferruginous cathartic, to be taken twice a day, about eleven and six. Usually it is an acid mixture, designed somewhat as follows: Ferri sulphatis, gr. xxiv.; magnes. sulph., ℥ vi.; acid. sulph. arom., ℥ i.; tinct. zingiberis, ℥ ii.; infus. gent. co. vel quassiæ, ℥ viii.; Fiat. mist. Sig. One-sixth part twice daily, about eleven and six. Occasionally this acid mixture produces sickness, dries the skin, and is otherwise ill borne. In such cases I prescribe an alkaline cathartic mixture: Ferri sulphat., gr. xxiv.; sodii bicarbonat., ℥ ii.; sodii sulphat., ℥ vi.; tinct. zingiberis, ℥ ii.; spts. chlorofor., ℥ i.; inf. quassiæ, ℥ viii. Fiat. mist. Sig. One-sixth part twice daily, about eleven and six. Sometimes neither mixture agrees, and then I prescribe sulphate of iron in pills with meals, and a saline aperient on first waking in the morning.

Upon the plan of treatment here described nine out of ten cases of this anæmia of girls recover their health in from one to three months; and if, when health is quite restored, one prescribes once or twice a week an aloes, myrrh, and iron pill, in doses just sufficient to bring about a moderate natural action of the bowels, the recovery will prove in all probability permanent. But upon this statement some of my auditors will remark, "It is the iron which cures; it is not the aperient." That iron has much to do with the cure of the malady I admit, but I doubt if it plays the chief part; and I know that in numerous cases the use of iron, arsenic, and manganese unaccompanied by aperients has failed to cure. Furthermore, I have seen many patients who, having been treated in this manner unsuccessfully for months, speedily recovered their health under the influence of a ferruginous cathartic mixture and a regulated diet. And so clear and strong is the teaching of my experience upon the point under consideration that if in the treatment of this malady I were perforce limited to the employment of one sort of drug, the drug which I should choose for use would be an aperient.

And here I end where I began, by contending that the anæmia or chlorosis of girls arising in nervous constitutions with imperfectly developed sexual organs is caused for the most part, and in the first instance, by feculent retention and its consequences, and that the right as well as speedily successful treatment lies in the enforcement of a sound hygiene, the administration of ferruginous cathartics, and in the provision after cure for a daily and, as far as possible, a natural relief to the bowels.

The cardinal idea embodied in this communication, the idea of the evolution of diseased states from the retention in the body of its excretions and of the products of their decomposition, is one of wide application and of extreme importance in medicine. It has been often dealt with under the heavy discouragements of imperfect knowledge and unsound doctrines in past times; and in this Society, as well as elsewhere, I myself have endeavoured to call attention to the consequences and issues of pulmonary, cutaneous, and renal inadequacies. For a time, however, the wonderful results of bacteriological research engrossed our whole attention. But now that we are ceasing to be dazzled by their brilliancy and have had our visual powers restored, we can see that the ideas of auto-genetic and of bacterial infection are so closely related, and so curiously interact, that the true place of bacteriology in scientific medicine cannot be finally determined until the chemistry of all the devolutionary processes has been further advanced, and the relations of animal alkaloids and extractives to the genesis of pathological processes has been experimentally investigated anew.

Cavendish-square, W.

ON THE TREATMENT OF CANCER.

By PROFESSOR JOHN CLAY.

THE following cases of epithelial cancer have been treated during the past year, and as the disease has disappeared under the use of Chian turpentine they may be deemed of sufficient general interest to merit publication.

Epithelioma of the Uterus and Vagina.—Mrs. B——, aged fifty-five, residing in Devonshire, consulted me on Feb. 16th, 1887. She has never had children. She was operated upon twenty years ago by the late Sir J. Y. Simpson for contraction of the os uteri. Since that time she has not enjoyed robust health, but has not suffered from any special illness. Menopause two years ago. She has an anxious expression, is anæmic, but not cachectic. Six months ago she had a profuse purulent discharge, which continued for two months, when a severe hæmorrhage ensued lasting more than a fortnight. She had some pains in the back and in the lower part of the abdomen, but they were never very acute. Palliative treatment only was adopted until the gravity of the case was recognised by a consultant, who excised the os uteri four weeks before I saw her. The operation did not arrest the growth, which seemed to develop more rapidly afterwards and speedily involved the vagina. A few days before coming to me she consulted Mr. Knowsley Thornton of London, who confirmed the diagnosis of malignancy and expressed his opinion that the case was too far advanced for operative treatment; he thought it improbable that the patient could live longer than a month.

On examination I found that the posterior wall of the vagina at its upper part was occupied by a growth of the size of a walnut. There was also a nodule, which was more diffuse, and seemed to arise from the anterior wall of the vagina. These growths, which bled readily on manipulation, met in the centre, and entirely prevented any exploration of the uterus. The lymphatic glands were apparently free, and there was no bladder or rectal complication.

As there was no other plan of treatment open to her, I

recommended that the Chian turpentine should be pushed vigorously, the patient deciding to remain in Birmingham under my care. She was ordered one teaspoonful of Chian turpentine mixture, with resorcin, three times daily, to be rapidly increased to nine teaspoonfuls; the vagina to be syringed with equal parts of vinegar and water twice a day, and the growth to be painted two or three times each week with a solution of chromic acid (1 in 24). With the use of these remedies the growths diminished rapidly during the first two months, so that I was enabled to determine that the one mass did not proceed from the vaginal wall, as there was a projection of uterine tissue remaining, about a quarter of an inch in extent, proving that at the first examination there was considerable eversion of the cervix, and that when reduced in size the parts resumed a more normal position. The treatment was steadily continued, with occasional omission of the medicine, for two or three days consecutively. The vaginal growth entirely disappeared in about four months. The "stump" of the uterus was irregular, but did not present to the naked eye any appearance of being cancerous. There was no pain, and the slight discharge was singularly free from odour. At the end of six months the patient could walk three or four miles daily with comfort, and on a few occasions she drove upwards of twenty miles in an open carriage without experiencing fatigue. At the seventh month of the treatment she expressed herself as feeling well, and left Birmingham for Devonshire. Dusart's syrup was taken for the last three months. Mr. B——, in writing from home to me, stated that he had not seen his wife looking so well for fifteen years.

I had an opportunity of carefully examining Mrs. B—— a few days ago, when I found that the vaginal growth had entirely disappeared; the part it had occupied was covered with pale but healthy mucous membrane. The portio vaginalis was limited to a ring of healthy tissue about one-third of an inch in depth. The os was patulous, readily admitting the finger, which passed into the uterus about three-quarters of an inch. The interior was smooth, excepting posteriorly, where there was a nodule the size of a pea, which looked healthy, and appeared to be a portion of tissue which had escaped the cancerous attack. There was no discharge, and the patient was exceedingly well.

Epithelioma of Tongue.—Mr. S——, of Sheffield, aged forty-eight years, consulted me on May 20th, 1886. He was in fair health and well nourished. He stated that he had been suffering from an ulceration of the mouth for some time, to which caustics had been frequently applied. He had recently seen Mr. Jonathan Hutchinson of London, who pronounced the case to be one of epithelioma, and advised its immediate removal by excision. The operation, as represented to the patient, appeared to him an unusually severe one, especially as it did not promise to permanently cure him. Casually hearing of the case of Mr. M——, recorded in THE LANCET of Oct 16th, 1886, he determined to consult me.

On examination, a fungating growth was found in the floor of the mouth on the left side, involving the gum and the edge of the tongue for an inch and a quarter. The tissue surrounding it was very dense, the infiltration extending for quite half an inch. There were no sharp or irritating teeth, but the patient was a great smoker.

He was ordered Chian turpentine with resorcin, and to take one-twelfth of a grain of chrysophanic acid in pill every other night, also to have the growth painted with a solution of chromic acid (1 in 24) every other day. A gargle of perchloride of mercury (1 in 2000) was used as an antiseptic. This treatment was continued for four months, when it was found that two pieces had sloughed away from the anterior edge of the growth, and that the surface of the ulcer was covered by the characteristic grey slough usually present after the use of the mixture. The medicine was increased in quantity, and was well borne. The infiltration lessened, and the growth gradually disappeared—first from the gum,—being replaced by apparently healthy tissue. The floor of the mouth healed over, and the ulceration was limited on the tongue to a patch little larger in size than a sixpence.

At the end of thirteen months of the treatment the patient went to the seaside, where he caught a chill, and for the first time there was an enlargement of the left submaxillary gland, and a small abscess formed in the floor of the mouth. He was ordered half-drachm doses of the syrup of iodide of iron, and was directed to discontinue all local applications for a fortnight. At the end of this time the adenitis had disappeared. When two months more had elapsed the ulcer was only the size of a threepenny-piece. Mr. S—— has been able to attend to his profession during the whole of the treatment, and is now in excellent health. He patiently and perseveringly followed out the treatment, being ably nursed by his wife, to whom great credit is due for the punctual and careful manner with which she carried out my instructions.

Epithelioma of Nose and Face.—Mrs. S——, aged forty-five, a widow, consulted me on June 4th, 1887. Menstruates regularly; general health good. Has an epithelial ulcer on the left ala of the nose, and encroaching on the cheek. It began as a small warty growth two years ago, and readily bleeds during bathing, &c. Perforation was imminent. She had been under medical care almost constantly since the appearance of the disease, but without benefit, and as the affection was rapidly extending, she applied to me.

In this case I was desirous of trying the effect of the Chian turpentine alone. I therefore ordered her two teaspoonfuls three times a day, and to dress the ulcer with simple ointment. During the first six weeks there was no change in the appearance of the condition, and she began to despair of ever being cured. I told her, however, to persevere. After the treatment had been continued for two months the sore was covered with a greyish slough. At the fourth month two-thirds of the ulcer had healed, showing only a dark crust about the size of a fourpenny-piece. In two or three weeks the scab fell off, leaving the sore absolutely healed.

Epithelioma of the Uterus.—Dr. Hamilton of Finsbury-circus, London, has kindly furnished me with particulars of a case treated by him, and of which nothing was known to me until I received his report. The notes should be very highly appreciated, as the case is unique in regard to independent testimony, combined with a thorough and incontestable diagnosis. The communication is as follows:—

"May 27th, 1887.—The patient some five or six years ago had a small growth on the cervix uteri, which I pronounced to be epithelioma; it was hard, nodular, and attended with an irritating discharge, which was frequently bloody. After consulting a local medical man, who confirmed the diagnosis, I took her to Mr. Knowsley Thornton, who also agreed with us, and excised the growth, putting on chloride of zinc paste afterwards. I then had sections made of the tumour, examined it microscopically, and sent one to Mr. Thornton; it was undoubtedly malignant. The growth returned in about six months' time, and the patient again saw Mr. Thornton, who stated that the cancerous material had now invaded the body of the uterus, which was fixed with it, and that this time he could do nothing without he scraped it all away from the interior. This, however, he did not advise at all strongly; he just took off what he could on the vaginal part of the cervix, and put on some chloride of zinc paste as before. I then made up my mind to try the Chian turpentine, and I kept her on that and the compound sulphur pills for about a year; the symptoms gradually disappeared, the discharge and blood lessened, until, I may say, now there are no symptoms whatever indicating a return. Now this was a case of undoubted epithelioma, as shown microscopically; and I have, as you may imagine, now the strongest possible faith in the efficacy of Chian turpentine."

Birmingham.

THE CLIMATIC TREATMENT OF PHTHISIS IN THE STATE OF COLORADO.

By M. CHARTERIS, M.D.,

PROFESSOR OF THERAPEUTICS AND MATERIA MEDICA, GLASGOW UNIVERSITY.

FROM a very early period in the history of medicine we learn that change of climate and change of air have been considered as remedial agents of great efficacy. Supported by custom and fortified by experience, this opinion was always acted upon, although there were no substantial reasons given for doing so. In fact, we may say that until Sir James Clark's book was published on the "Influence of Climate," in 1829, no definite ideas had been entertained, and no rules had been laid down, for the guidance of physicians in selecting a climate for any disease. Sir James Clark's treatise dealt with the influence of climate in the prevention and cure of chronic diseases, more especially of the chest and digestive organs. The book is full of wise reflections

gathered from a large experience, and is couched in language forcible and plain. It may be read at the present day with great advantage, although the views he expresses as to tubercle may be considered, in the light of this scientific age of bacteriology, as somewhat antiquated. Since Sir James Clark's time much has been learnt as to the nature of tubercle, its causes, its development, and its progress either to recovery or to death. No one doubts now the utility of a climatic change in phthisis, but opinions vary as to the place that should be selected. It may be said broadly and truly that no climate possesses specific powers, and hence we find some advocating a warm, moist atmosphere amid flowers and sunshine, while others prefer one amid snow and ice. No general rule can be laid down. The decision in each case must to a great extent be guided by the age, the sex, the mode, and rank of life of each consumptive patient. These considerations can never be undervalued by anyone whose advice is sought. Yet while individual cases must be duly weighed, I think the tendency of the present medical views gives precedence in a case of phthisis to a dry rather than a moist atmosphere, a high altitude to a low one. And if we look at tubercle briefly from its pathological aspect as to what it is and how it grows, we can better understand how the preference is given.

Nature of Tubercular Change.—Avoiding all controversial points as to its etiology, being primarily bacillus or otherwise, we may state that tubercular change usually begins in the walls of the smallest bronchi, generally in one or two circumscribed spots, and in the great majority of cases in one apex. The tubercular infiltration thus begun in the bronchial wall spreads gradually to the periphery, establishing tubercular peribronchitis, in which are noticed "cheesy nodules," which at first are grey and later yellowish. The adjacent nodules run together; a little irregular excavation succeeds, which is the first beginning of the formation of a cavity. With the disease of the smaller bronchi the alveolar tissue of the lung is also affected, and partial lobular pneumonia results, which from its tubercular character becomes caseous. The alveolar walls are also diseased, and the destruction of the cheesy tissue results in the further formation of cavities, or in diffuse caseous pneumonia. With these destructive processes there is a tendency towards circumscribing the disease, thus limiting its growth and causing healing. New connective tissue forms round the tubercular infiltration, especially where there is already destruction of tissue, and this chronic interstitial process leads to contraction and the formation of a cicatrix. In chronic phthisis the conservative contractile changes evidence that the tubercular process may heal. This tendency to heal may, however, be baffled by the infectious material, being carried into other bronchi, and in this process the tubercle bacilli are important agents. So new tuberculosis is set up, and the disease is constantly extended.

Influence of Climate on Tubercle.—It seems evident from this short pathological survey that the true treatment of phthisis once begun is to assist nature in limiting the progress of the disease. Climatic treatment is obviously suggested, and the nature of that climatic treatment will now be considered. Tubercle cannot live without moisture. A moist air nourishes its growth, a dry air tends to destroy it. The breathing of pure, dry air, not by fits and starts, but constantly, is what we have to desire, and the question is now narrowed to this, Where can this pure, dry air be found? Undoubtedly in Europe we find this in winter at Davos Platz, but the unfortunate facts stare us in the face that phthisical patients can only remain there during the winter, and that they must remove to some other locality when the snow melts. The healing process, thus commenced but not finished, is again tried by a different atmosphere, not dry, but variable and moist, and again the disease, not in all cases, but in many, resumes its fatal course. Davos Platz has not therefore the elements of a permanent cure, and we must look to other places where the conditions are more favourable. It appears to me that we have these conditions in the air of Colorado at certain stations where the altitude is great. Thus we have at Colorado Springs a charming health resort at a height of 6000 ft., situated six miles from Pikes Peak, which towers up to the extent of 14,000 ft. Manitou Springs (altitude 6700 ft.) lie at the base of this mountain, but the circumscribed position and the lack of a free current of air and afternoon sunshine render it not such a desirable residence during winter as the Colorado Springs. Passing further on in the same range of the Rocky Mountains we come to Denver, with a population estimated at 80,000, and an elevation of 5000 ft. This town is well built. The streets are wide, the hotels large, the shops attractive, and the environs interesting. In none of the places mentioned are there cramped surroundings. They are not hemmed in by mountains, but stand on elevated plains, over which a pure, dry air ever sweeps. The seasons are marked by no extreme climatic vicissitudes. There is no extraordinary heat in summer, and no excessive cold in winter. The average summer heat is 70° F.; the average winter cold is 9·5° F. Winter steals upon autumn with no marked change. The snow that falls rarely rests more than twenty-four hours on the ground, and leaves, when melted, no slush under the foot. In no season of the year is there a prolonged rainfall, for the whole amount annually only reaches fifteen inches. The principal rainfall is from April to the middle of October. The rain is never continuous, only falling at intervals in heavy showers lasting rarely more than twenty or thirty minutes. The medical officer of health of the city of Denver has kindly forwarded to me a summary of the monthly meteorological reports for the last ten years, and statistics as to the mortality for five years. From the meteorological report I learn that during the periods mentioned the mean temperature of June was 67·9°, of July 70·0°, of August 68·6°. During the same months the total precipitations for June was 1·4, for July 2·4, and for August 1·4. During the same months there were no foggy days, and only twice in each month were there cloudy days, the other days being clear and fair. During my stay at Denver I noticed the diathermancy of the air, or the increased facility by which the sun's rays are transmitted through the attenuated air. This tends, according to Dr. Denison, to an increase in the difference between the sun and shade temperatures, according to the elevation, in the proportion of 1° F. for every rise of 235 feet. Though the sun in August was hot in the open, yet in the shade during the day and in the evening it was always cool.

Action of the Colorado Climate on a Healthy Person.—Previous to describing the action of the climate of Colorado in disease, we shall briefly allude to its influence on a healthy person. A marked influence is exerted on the circulation. The pulse is quickened, and the beats of the heart are audible when standing still. This increased cardiac action sometimes gives rise to considerable anxiety to new comers, and they should be informed that in the course of a week these disagreeable impressions will cease, and the circulation will become normal. During the continuance of this increased action of the heart the nutrition of the brain is markedly disturbed. There is little desire for sleep at the usual hour for going to rest; and sleep, when it does come, is restless. The slightest noise awakens, and dreams, vivid but not very pleasant, are associated with incomplete repose. All people suffer more or less from sleeplessness on their first arrival in Colorado, but the condition is aggravated in females, owing probably to their more delicate and sensitive nervous system. Full, deep inspirations are taken which expand the lungs, and the expirations seem less prolonged than in a low latitude. The keen air leaves the mouth dry, and this sensation, appreciable at an elevation of 5000 ft., becomes very marked at a higher altitude. My experience on this point was peculiar, and to me unexpected. I proceeded from Denver by rail to Silver Plume, a small village up the gorge of the Rocky Mountains. When I arrived there at midday, as the day was not warm, I started with the intention of taking a good long walk. But the effort was fruitless, for in a short time I found my mouth dry, my voice hard and croaky, while a panting indescribable "all-overish" sensation replaced the easy respirations of health. I was glad to rest and wait patiently for two hours until the train arrived to take me to Denver. The skin never feels moist. Yet there must be considerable perspiration, for the urine markedly diminishes in quantity, although the amount of fluid taken is equal to that drunk at an ordinary altitude. The appetite is keen, and food is enjoyed with relish and easily digested. These are the chief points of difference I detected, and physicians at Denver and Colorado Springs told me they were by no means singular.

Action of the Climate on the First Stage of Phthisis.—We shall now turn from considering the influence of the climate of Colorado in health, and speak of its action in tubercular disease of the lungs. We will suppose a case of phthisis at home, where weakness and loss of flesh have been followed by expectoration, and an increase of the evening temperature

to 99° F. If hæmoptysis existed, we will presume that for the present it is checked, for unless this is the case a sea voyage from our country undoubtedly tends to bring it back. The patient leaves home, say, at the end of August, and arrives at Colorado fourteen days afterwards.[1] His first step on arrival is to secure, according to his means, suitable rooms, and these can be had in private houses or hotels at terms varying from 10*s.* to 15*s.* per week; if with board from 24*s.* to 48*s.* His next step should be to consult a medical man acquainted with the climate and of good professional standing. The advice given to him will in all probability be this: To be out of doors all day, and to take systematic exercise; to avoid night air, and to retire to rest early. Above all, it will be deemed advisable to insist on the patient considering himself or herself an invalid, and to take no liberties either in food or drink, and to have amusements in which there is nothing to excite or to agitate the nervous system. Rigorous self-control must be put in force, and the professional mandate must be strictly and literally obeyed. Returning health makes this difficult at times, and restraints may be considered irksome. Yet a false step may retard all the improvement happily begun. Sometimes, on account of this, a cold is caught and broncho-pneumonia develops, the prognosis of which is very grave, for all acute inflammation of the respiratory tract in high altitudes tends to assume a serious form. After six months, in all probability, the patient will feel well, with no cough, no expectoration, no weakness, and with a temperature which is normal. The bodily weight will have increased, from the bracing air necessitating the taking of more food and assisting the proper assimilation of it by the system. Shall the patient now return home? Undoubtedly not. The risk is too great. There is arrest of the disease but no permanent cure. A moist, damp air will certainly bring it back in an aggravated form. Consequently the advice is generally given that the patient, if a man, should proceed to a ranche in the latter month of spring. There board varies from £2 to £2 10*s.* per week; but if the man can, and is willing to work, he will find no difficulty in obtaining employment. When the hay season commences, wages are paid to labourers at the rate of from four to six shillings a day with food. And on the same or increased terms he can earn his living as a cowboy, pursuing, by daily horseback exercise, the method of treatment, which Sydenham considered "as certain a cure for phthisis as quinine was for ague." From all I can learn, the cowboy's active life is one characterised by good fellowship, primitive manners, and redundancy of health. There are also opportunities for those who like this out-door life not merely earning a living, but of making money. The field is large, and the chances are many. If this life is not congenial, then in a town like Denver, with 80,000 inhabitants and increasing rapidly, he has a prospect of going into business with good hope of success.

(To be concluded.)

SEVEN CONSECUTIVE CASES OF LAPAROTOMY.

BY W. BALLS-HEADLEY, M.A., M.D. CANTAB., M.R.C.P.E.,
HON. PHYSICIAN TO THE WOMEN'S HOSPITAL, MELBOURNE, VICTORIA.

CASE 1. *Multilocular Ovarian Tumour; Ovariotomy; Recovery.*—Mrs. H——, aged thirty-nine years, was first seen by me in November, 1877, when I treated her without operation for double laceration of the cervix and retroflexion. In May, 1880, she had an enlarged ovary posterior to the uterus and no retroflexion. In February 1881, the tumour was exceedingly hard to the feel. Mr. Rudal gave ether, and I aspirated one pint and a quarter of clear, straw-coloured fluid, which was one-third albumen, and contained Drysdale's cells. In October I drew off six ounces more, and decided, on its refilling, to remove the cyst by the vagina, but did not see her again till March, 1886, when she was confined to her bed. A multilocular ovarian cyst occupied the abdomen to the ensiform cartilage and was moderately prominent; but she was rendered ill more by the occupation of the pelvis by a solid mass, which appears to have developed from the original pelvic cyst, than by the abdominal enlargement. Her pulse was 120, thin; and her temperature was from normal to 100°. She was very thin, and her face drawn.

On March 29th, Dr. Burke saw her in consultation with me, and on the 31st he administered ether and methylene, and, assisted by Drs. Le Fevre and Lalor, I operated. An incision two inches and a half long was made between the umbilicus and pubes, and the various cysts aspirated into a two-gallon bottle, as is my custom, when the pelvic tumour was with some difficulty extracted. The left ovary was also cystic, and was removed. The pedicles were tied with silk with a Tait's knot. The wound was closed with silver and horsehair sutures. The operation from beginning to end occupied twenty-five minutes.

She was treated with a pill of powdered opium (one grain) occasionally when in pain and awake. The temperature did not exceed 100°, nor the pulse 100. On getting up, the uterus was retroverted, and a severe drag on the abdomen occurred on walking, apparently from an adhesion of the left pedicle. A pessary presently relieved this, and she became quite well.

CASE 2. *Multilocular Ovarian Tumour; Ovariotomy; Recovery.*—Miss P——, aged forty, a patient of Dr. Snowball, who called me in consultation, was in bed for six weeks with rheumatic fever when eight years old, and since then has been subject to rheumatic pains. Has for years had piles; worse the last year. In December, January, and February had low fever and cough. In March noticed a lump in the lower abdomen, when she was much increased in size, and since then has become very much larger. Every day has pains like needles or shooting at the lower right abdomen, or from right to left, and has got thinner. The catamenia has always been regular. Is 5 ft. 8 in. high, thin, with a prominent abdomen. There is a tumour extending from the pubes to half-way between the umbilicus and ensiform cartilage, occupying the whole of the right side and three-fourths of the left; doubtfully fluctuating, apparently not; dull on percussion, but with resonance in the right groin, and less in the left. The hymen is entire. The os uteri dimply. The sound passes in the normal direction through the cervix to the fundus two inches and a half. Pulse 120. There is a systolic bruit at the base and apex. The rest of the organs normal. On exploratory puncture, a straw-coloured fluid gave Drysdale's cells.

On August 5th, assisted by Drs. Snowball and Fisher, Dr. Burke kindly administering ether and methylene, I made an incision two inches and a half long midway between the umbilicus and pubes, and found a very multilocular tumour of the right ovary, which was aspirated as usual. The left ovary, which was cystic, and as large as a hen's egg, was removed. The pedicles were tied with fine silk in a Tait's knot, and the wound closed with silver and horsehair sutures. The operation occupied thirty-five minutes. No sedatives were given, but on occasions sulphate of magnesia or calomel, after Lawson Tait's method. The temperature did not exceed 100°; the pulse from the cardiac affection varying from 100 to 120. There was some difficulty from constipation, from the tenderness of the piles, and a contracted sphincter ani, while the hymen prevented vagina-rectal assistance. The recovery was uninterrupted, and she was up on the sixteenth day, and has been quite well except for the piles, which Dr. Snowball and I lately removed.

CASE 3. *Multilocular Ovarian Tumour, with Twisted Pedicle; Acute Peritonitis; Pregnancy; Ovariotomy; Abortion; Abdominal Abscess; Recovery.*—After a series of successful ovariotomies, the question arises, why should fatal cases occur in future? The mode of avoidance of one class of them is here indicated. Mrs. S——, of South Melbourne, had had two children, the last three years ago. The catamenia had ceased on May 24th. On August 26th she was taken ill, and Dr. Barker found her suffering from acute peritonitis and constant vomiting. Dr. Brett also saw her. I met Dr. Barker in consultation on Sept. 2nd, when her temperature was 102° and pulse 120. The abdomen was greatly distended, and the skin brawny; resonant in the hypochondria, dull in the flanks. The diagnosis was that, in the absence of other apparent cause for the peritonitis, a tumour had burst or become twisted. She took one grain

[1] The railway rates from New York to Denver are liable to frequent fluctuations; at the present time they are as follows: First class, £10 7*s.* 11*d.*; second class, £9 11*s.* 3*d.*; emigrant, £8 14*s.* For the passage from Glasgow to New York by the State Line the rates are: Saloon, £7 7*s.*, or £8 8*s.*; and steerage, £4. The rates by the Anchor Line are from £8 8*s.* to £10 10*s.*

of powdered opium in pill every four hours when awake, and had linseed poultices applied. On the 4th the temperature was 100°, pulse 100, the abdomen more lax, and a tumour could be felt reaching from the pubes to half way between the umbilicus and ensiform cartilage, central, freely fluctuating; neither fœtal heart nor placental bruit could be heard. On the 6th the tumour was more distinctly felt. We decided to admit her at once to the Women's Hospital for immediate operation, on the diagnosis of ovarian tumour, with twisted pedicle and pregnancy of about three months and a half.

In the hospital on Sept. 6th I drew off with a fine needle one ounce of light red fluid, which gave atrophic blood cells only. At a consultation of the hon. staff opinions as to the condition varied, and in view of the unsatisfactory microscopic examination it was determined to wait. From the 7th to the 10th, the morning temperatures were normal, the evening temperatures varying from 98·8° to 99·8°; pulse from 96 to 100. Adhering to my original opinion, and guided by the experience of former cases, on Sept. 10th I again drew off an ounce of fluid, which was of a deeper red than before, and full of Dysdale's cells. A sound was gently passed apparently to the fundus uteri (four inches), and a consultation was called for the 12th, with a view to an immediate operation, which was held and so determined.

On Sept. 13th the operation was performed in the presence of Drs. Barker, Doyle, Forster, Meyer, and Workman, Dr. Burke giving ether and methylene, Drs. Fetherston, Rowan, and Hooper, the resident surgeon, assisting. The abdominal walls had many bleeding points, which were compressed with Spencer Wells' forceps. There was general peritonitis. The tumour was seen to be of a dirty purplish-black colour. The contents (one gallon and a half of a purple colour) were aspirated with a large trocar into a two-gallon bottle. The tumour was on the right ovary, was universally adherent, but readily separated, and similarly the intestines; the pedicle was occupied by clots distending it irregularly as a flattened sausage, and so extending to the right iliac region, to which it was closely adherent. This had previously burst, and had thus apparently caused the original peritonitis. It left a bluish-grey clot surface close to and apparently attached to intestine, so that it could not be removed; it was sponged as clean as possible. Below this expansion the pedicle was tightly twisted, deep down, close to the uterus, and was with difficulty tied with a Tait's knot, whence there was no hæmorrhage. A large piece of semi-gangrenous omentum, which had been adherent to the tumour, and which bled at many points, was similarly tied and removed. Much oozing occurred from the previously adherent intestine high up, deep, close to the abdominal aorta, which pressure did not stop. Sponges squeezed out of a one to four solution of liquor of persulphate of iron produced more but not quite perfect effect. The oozing was from very numerous but exceedingly fine points in the peritonitic surface of the lately adherent intestine. The left ovary was found enlarged to the size of a hen's egg and cystic, and its Fallopian tube much enlarged and intensely inflamed. Both were tied close to the uterus with a Tait's knot and removed. Great care was taken in thoroughly cleansing, and the cavity was washed out with pure warm water. In view of the intense congestion and slight bright oozing from the untiable intestine as mentioned, as well as the dirty clot surface existent on the right side, a curved glass drainage tube reaching to Douglas's space was introduced. The uterus reached to above the pubes, was apparently pregnant three months and a half, and was much congested. The wound was then closed and dressed with absorbent cotton. At 10 P.M. the pulse was 96 and the temperature 98·5°; and, as she was very restless, a suppository of a quarter of a grain of morphia was introduced into the vagina. No more sedatives were given.

The patient progressed well, and her temperature did not exceed 100°, except when a large stool descended and filled the rectum, whereby some strain was, no doubt, put on the newly coherent surfaces; serum came through the drainage tube, which was removed on the second day, and some matter subsequently through the upper end of the wound. On Sept. 20th she had a vaginal red discharge like menstrual fluid. On the 22nd she became convalescent, and her temperature normal. On the morning of Oct. 5th she had pains, and the umbilical cord was found in the vagina, but the temperature and pulse were normal. It was impossible for her to carry the child to term in view of the universal adhesions in the abdominal cavity. At 4 P.M., the temperature rising to 99·5° and the pulse to 108, it was deemed necessary to assist her, and under methylene I delivered her, piece by piece, of a fœtus with breech presentation, which had been dead some two or three days, with considerable difficulty on account of a contracted uterus. The placenta was adherent and the uterus hourglass, and thus it was impossible to remove it without undue bruising, and it was therefore left. The temperature then fell to normal; but on the afternoon of the 8th it suddenly rose to 102·8°, and I deemed it necessary to complete delivery, which was effected under methylene with considerable difficulty, since the placenta was situated at the summit of the hourglass contraction. It came away in small pieces, till, at a happy moment, the mass was seized and removed. She then became convalescent till the 13th, when she complained of pain and fulness over the centre of the right ilium, where a tumour of the size of a hen's egg, and quite resonant from before backwards, was felt projecting in the direction of the centre line. It was realised that this was a suppuration of the ragged burst veins, projecting towards the median line, and pushing before it the intestines matted together by the peritonitic adhesions. This rapidly increasing, on the 13th, under methylene, I introduced, as much from the side as possible, a fine trocar, and, getting pus, cut the skin and pushed in a large trocar by the side of the smaller, and through it introduced a drainage tube. The temperature contined normal; but, in spite of drainage tube and syringing with a solution of Condy's fluid, the discharge became exceedingly offensive and did not freely escape by the syringing catheter, which entered about three inches; and on Oct. 22nd the temperature rose to 101·8°, and the woman was retrograding. Accordingly then, under methylene, I enlarged the opening so as to introduce the finger, and found a mass of rotten grey clots, which were removed by syringing, and a large drainage tube was inserted. From this time she progressed, the temperature remaining quite normal, and is now up walking about, and looking well and fat; yet a probe passes down two inches and a half, but no pus escapes, and there is only a sense of slight deep induration. It is probable that increased strength will heal the channel. She is now at home and will occasionally be seen.

The lessons to be learnt are:—1. Had the operation been performed on September 6th, instead of the 13th, the adhesions would have been less vascular, and so no hæmorrhage might have occurred; but what a catastrophe had she had some disease of pregnancy, as dropsy of the amnion, and opinions differed. 2. The lateral clots and the omentum would have been less advanced towards gangrene. 3. The necessity of the presence of a foreign body, the drainage tube, might have been avoided. 4. The risk of clotted veins on the proximal side of the pedicle would have been reduced. 5. The exploratory fluid should be taken from the lowest depths of the tumour, or the patient have been previously made to stand or have been placed on the side. The main general axiom derived is, "When in doubt perform an immediate exploratory operation." I trust I may never omit to do this in cases of such diseases with complications, in which, however, the given diagnosis desired for a capital operation is densely clouded. I hope shortly to bring forward a series of cases of ovarian tumour with twisted pedicle, which will show that those in which an immediate operation has been performed have been crowned with complete success, while in those in which delay has occurred fatal results have been courted.

CASE 4. *Unilocular Ovarian Tumour, closely adherent; Ovariotomy; Hæmorrhage; Recovery.*—Mrs. K——, aged twenty-seven, has never been strong, and always subject to great dysmenorrhœa and bearing-down pain, and has worn a pessary. Is said to have had a miscarriage at two months four months ago; since this she has had constant pain in the right iliac region, pain on walking, and much leucorrhœa. The catamenia is more frequent, and less in duration and quantity.

On Nov. 3rd the abdomen had a hard-feeling tumour, three-fourths to the umbilicus; the vagina contained a large pessary; the os uteri was very high, looked back, was pale, and had a small opening surrounded by slight granulations. No sound passed the inner os. The body of the uterus felt very hard, and on either side of the apparent uterus were firm tumours extending to the sides of the pelvis, only slightly movable. There was no albumen, and the heart and lungs were normal. On Nov. 5th, under methylene, administered by Dr. Gray of South Melbourne, the sound was after some difficulty introduced into an anteflexed uterus two inches

and a half. On the introduction of a fine trocar on the 7th, dun-coloured fluid dripped, which was sticky, and under the microscope gave atrophied blood cells and a moderate number of Drysdale's cells. On the 15th Dr. Burke administered methylene at my private hospital, and Dr. Snowball assisted me, when I made an incision two inches and a half long down to the tumour, and aspirated thirty ounces of dirty greyish-brown grumous fluid. The tumour, which was of the right ovary, was completely and closely adherent to the right iliac region and posterior wall of the uterus, and was with difficulty defined and separated. The pedicle was tied with silk. The left ovary was cystic, of the size of a hen's egg, and was similarly tied and removed. There was persistent hæmorrhage from the posterior uterine adhesions, which pressure nearly stopped, but it was deemed necessary to introduce a drainage tube. The operation lasted an hour and a quarter, on account of the adhesions and hæmorrhage. The tube was removed in twenty-four hours, during which there was some escape of bright blood and serum. The temperature was from subnormal to normal for the first week, when a large stool descending raised it to 100°. On the third day there was a tendency to jaundice, relieved by ten grains of subchloride of mercury. The pulse was afterwards 72, and she was convalescing.

I have a strong feeling in favour of private ovariotomies over those in public hospital, having only had one death among the former, which occurred more than four years ago.

(To be concluded.)

THE DISEASE OF INEBRIETY AND ITS TREATMENT.[1]

BY T. D. CROTHERS, M.D.,
SUPERINTENDENT, WALNUT LODGE, HARTFORD, CONN., ETC.

IT is a fact of historic interest that inebriety was called a disease long before insanity was thought to be other than spiritual madness. On an old papyrus found in one of the tombs of Egypt, dating far back into antiquity, was found a clear, explicit recognition of the disease of inebriety. Herodotus wrote, four centuries before the Christian era, that in drunkenness both body and mind are sick. Diodorus, Plutarch, Chrysostom, and Alpian, the Roman purist, all mentioned the disease of inebriety long before and after the Christian era. From that time down to the present century this fact has been mentioned by scientists and philosophers in almost every age. By a strong shifting of events, insanity, which was supposed to be a spiritual affection until a comparatively recent date, is now studied as a physical disorder; while inebriety, which was mentioned as a disease twenty centuries ago, is still invested with the superstition of a spiritual origin At last, within a quarter of a century, this great truth has been formulated and organised into the realm of practical science. This is a discovery in science, evident from the sharp contradiction which it has provoked, and the same opposition and battle which every new truth must encounter before it is accepted. In the first surveys of a new country only a few general outlines are marked out, leaving wide gaps and stretches to be filled up by other and further studies. In like manner the purpose of this paper is to point out some outline facts of the disease of inebriety and its treatment, and indicate, not only the few facts known, but the wide ranges of the unknown, awaiting future discovery and study.

When inebriety is seen from a scientific point of view, it is found to be controlled by laws, which vary according to certain physiological, psychological, and physical forces, of which heredity, environment, culture, nutrition, brain and nerve vigour, &c., are prominent. When accurately recorded histories of many cases of inebriety are studied and compared, certain fixed ranges of causes appear which seem to follow some regular order of movement. The following is an outline of those causes: 1. Certain conditions of heredity, certain physical and psychical shocks, and nerve injuries in a large proportion of cases are followed by inebriety. 2. Certain structural changes of the brain and functional irritations precede inebriety in many cases. 3. Certain unstable brain organisations, irregular, retarded, and defective brain developments, manifest in great feebleness or intense activity, are intimately associated as apparent existing causes with many cases of inebriety. 4. Certain diseases seem to have a special predisposition to develop into inebriety with or without any exciting causes. These conditions are uniformly found either alone or combined in all perversions, certain disturbances of nutrition, and nerve cases of inebriety. The outbreak of inebriety varies widely, and is gradual and obscure at first, or sudden and precipitous. It may be masked for a long time, or may be very prominent, with long, irregular halts. In the first group of causes the inebriety may be of the dipsomaniac type, appearing suddenly. In the second group it is often concealed for a long time; in the third group long halts and apparent recoveries occur. In the fourth group it begins suddenly, and is of short duration. In the second and third groups inebriety is not unfrequently a symptom of insanity and general paralysis, and these diseases follow from inebriety.

The craving for spirits is not the disease, but only the symptom or expression of the disease. It is the demand of the disordered governing centres and general organisation for relief; and alcohol, as a narcotic, supplies this demand most perfectly. Often the first use of alcohol acts like a spark, concentrating and exploding the diseased tendencies which may have been forming or transmitted from the past. Also it may give an impulse or impress to a feeble, unstable organisation, that quickly merges into inebriety. In these cases a train of degeneration is started which will ever seek relief from alcohol. The more impulsive and intense the desire for spirits, the greater the degeneration. When the craving is paroxysmal, with free intervals, the degeneration is central and profound. All these periodical and paroxysmal cases are closely allied to epilepsy. The free intervals may recur with uniform exactness in time and duration. In some cases the return of the drink paroxysm may be predicted with as much certainty as an eclipse of the sun, and the duration of the paroxysm rarely varies more than a few hours. In other cases the paroxysms, both in length and free intervals, are irregular and uncertain, appearing unexpectedly and ending suddenly, in adverse conditions apparently. Thus, in some cases, the inebriate will begin to drink under the most opposed circumstances and surroundings, and will stop suddenly under equally adverse conditions, beyond all rational explanations to account for such acts. In certain cases, the appearance of health and the confident hopefulness of the patient are signs of the approach of a paroxysm. Great mental and muscular activity is often followed by an outbreak of inebriety, lower in degeneration than before. These strange and mysterious phenomena are undoubtedly governed by laws that will be known in the future. Such inebriates, like epileptics, have distinct nerve storms and explosions of morbid energies. This is literally a great, dark continent of the most fascinating psychological interest.

When inebriety is developed, either continuous or periodical, there are distinct traces of a regular order of symptoms. Other diseases may complicate and cover up the order of the march, but sooner or later the same symptoms appear, following the same order. Thus certain brain palsies of the highest centres, certain delusions and hallucinations, certain psychical manias and melancholias, certain morbid impulses and functional perversions, associated with anæmias, hyperæmias, and a great variety of complex symptoms, are sometimes masked with the appearance of health, but generally they are apparent.

A certain number of inebriates, morbidly conscious of their condition, live in the thought of their wickedness and misery; humiliation is coupled with a delirious faith of recovery; they are pleased to serve as examples for others; exalted delusions and delirious manias are always present. Another large class seem thoroughly unconscious of their condition. They have delusions of strength to recover, and believe all accounts of their danger or weakness are exaggerated for the purpose of creating alarm in them. This sense of danger grows less, and their faith in themselves increases in steady progression on to death. Although the action of alcohol may differ widely in different cases, the same general symptoms mark all the stages of acute and chronic degeneration.

Inebriety in America is becoming more nd more distinct

[1] Read in the Medical Section of the International Medical Congress held at Washington on Sept. 7th.

in intentity and maniacal symptoms. The use of alcohol is more precipitate, followed by mental excitement, delirium, nerve and muscle exaltation and depression. Increased culture and intelligence takes away the coarser and more repulsive symptoms of inebriety, but increases the maniacal and suicidal phases and mortality. Inebriety is more concealed to-day than ever before, and more intimately allied with, and terminates more often in, pneumonia, Bright's disease, apoplexy, and various organic and heart affections. Inebriety is increasing, as is shown by the fact of the increased consumption of alcohol in this country and the increased number of persons arrested for inebriety in our large towns and cities. The dipsomaniacs and the intermittent and periodical inebriates are increasing, and the moderate drinkers are diminishing. From a variety of evidence, as yet in outline, it appears that inebriety moves in waves and currents, prevailing like an epidemic, then dying away. This seems to be evident from the statistics of persons arrested for inebriety, and from comparative studies of the numbers of inebriates in different countries. From these data it appears that inebriety steadily increases up to a certain maximum point, then declines to a minimum number, resembling a tide-like movement of continuous ebb and flow. Some of these drink cycles have a period of about eight years. In Sweden it is fourteen years; in other countries it is less. The consumption of spirits in England was found to follow a similar ebb-and-flow movement of eight or ten years. These great movements seem to be beyond any range of causes that will explain their presence. They have been traced in cities and villages of New England in many instances, where it is clearly evident inebriety prevailed at certain times to great excess, then died away, only to reappear again after a lapse of years. The evidence is steadily accumulating, pointing out these great drink cycles, which, like storms, gather and increase up to a certain period, then die away. The great unknown forces and laws which regulate these drink epidemics await discovery. When they are known, then much of the mystery of the strange temperance revivals and agitations, which spring up and sweep over the land, dying away as suddenly as they appear, will be cleared away. Temperance agitations have a strange wave-like movement, evidently controlled by laws unknown. Who will doubt that they may not be the reactions of some high tidal waves of inebriety—the backward swing of some great drink cycle—a psychological protest and consciousness of the presence of some high point of inebriety, which will recede, and with it the agitation will die away. These are but hints, and faint outlines of facts and forces that control inebriety far above the roar of theoretical agitation and personal resolution. Inebriety is a disease governed by certain fixed causes which follow a certain order of events, and the evidence of these and other facts are clearly within the range of a more accurate study and a wider intelligence to remedy and prevent.

In the efforts to check and prevent inebriety, the interest and agitation are increasing far beyond all rational knowledge of the subject. The following are some of the theories on which the present efforts for cure are based. Moralists assume that inebriety is always a vice and sin, the only treatment of which is prayer and conversion. Temperance men and reformers call inebriety the result of a weak will power, and urge the pledge and the force of societies as the only real cure. The temptation of saloons and the facility of procuring spirits are supposed to be active causes, to be broken up only by prohibitory legislation. Ignorance in childhood of alcohol and its effects as a cause is supposed to be remedied by forced instruction in the common schools concerning the nature and character of alcohol. The theory most widely believed is that alcoholic excess is a sin and crime, to be cured by punishment and suffering. It has been stated that in this country during 1886 over 300,000 persons were arrested for inebriety and punished by fine and imprisonment. Yet it is the unanimous testimony of all competent observers that such means for restraining inebriety not only fail, but increase the very disorder they seek to remove. Every individual sent to gaol for inebriety is made more unfit for temperate living, and further removed from health and capacity to recover. He goes to gaol with impaired nutrition and degenerate brain and nerve force. He is suffering from brain anæmia and structural changes, with mental exaltations and depressions. In gaol the quality and quantity of food is ill adapted to restore and build up the weakened organism. The hygienic influences are wanting, the mental influence is bad, and the associates and surroundings still further depress and weaken the mental vigour necessary for restoration. The only compensation for this is the removal of alcohol, which is often a small factor in the treatment. All this and much more can be read in the anæmic faces, tremulous eyes, and depressed movements of inebriates in gaols and prisons. Happily the great delusion of inebriety being a moral disorder, a vice, sin, and crime to be punished, is passing away. In past ages the phenomena of nervous diseases and insanity were regarded as moral disorders, to be remedied by law and Church influence. These remedies, applied most vigorously, made no impression; insanity and nervous diseases steadily increased. To-day history repeats itself in the punishment of inebriates and the efforts of the Church and society to stop drunkenness, while the army of inebriates goes on increasing. As long as the causes are unknown the remedies will fail.

All exact study of the facts indicate that the disease of inebriety is both curable and preventable. We must realise that inebriety is a dangerous disease, not only to society, but to the victims, requiring restriction of personal liberty and legal guardianship, under medical care, in special surroundings. Like victims of contagious diseases, inebriates should be quarantined and forced to come under treatment. Society should not tolerate their presence, or permit them to injure themselves and imperil others by their acts. Dr. Bellaws said long ago: "Inebriates will all eventually be restrained in hospitals and treated medically the moment their liberty becomes dangerous to society." The terms of their confinement will be limited by the conditions and cure of the disorder. Society gains nothing by holding any man prisoner who is fit to be at large; liberty and human rights gain nothing by allowing any man to be at large for a moment who is destroying himself, his family, and his neighbours. Facts and experience show that this can be best accomplished in workhouse hospitals, where restraint and all other appliances can be gathered. These hospitals should be military training asylums, where medical care, restraint, occupation, and general treatment can be applied for long periods. They should be divided into three classes: the first for the chronic incurables, the second for recent cases and the middle classes, and the third for private and wealthier patients. The first and second classes of these military hospitals should be built from the moneys received from the licensed fund, and supported by the same fund and the labour of the inmates. The first class—that for the chronic cases—should be placed in the country on large farms, where various occupations could be profitably carried on. They should be managed by a board, with an expert superintendent, the same as in all State charities. The government should be of military exactness, and every condition of living and surrounding regulated with steady uniformity. Each case should be studied, and a course of treatment pursued that would build up both the mental and physical organisation, providing also rest, change, and occupation in exact surroundings, where every defect is antagonised, and every element of health encouraged and strengthened. The pauper inebriates who are now sent to gaol, and inebriates of all grades should be committed to these hospitals for periods of not less than five years. On apparent recovery within this time, they should be permitted to go out on parole, to be returned at once on relapse. Each one should be employed, and, if possible, be self-supporting. Practically, the final cure of persons in this class might be limited to exceptional cases, but the gain to society and civilisation by housing and treating these poor victims would exceed all computation. The second class of hospitals should be smaller, built in the same way, and conducted on the same plan of exact military care and medical treatment. In the case of persons of limited means who could pay some part of their expenses, and recent cases, who would come voluntarily or by force, under this restraint, for from one to three years' commitments, the same system of parole and occupation should be employed. The third class should be private hospitals, under the same general management and plan. Rest, medical care, change, and occupation should be suited to the needs and demands of all who could command them. They should be built by private enterprise, and be under the general care of the State. Benevolence would endow these places, and the special means of treatment would accumulate rapidly. The great principle of treatment would be, in all these hospitals,

to quarantine and house the patient, and treat all the conditions which enter into the disease as well as the disease itself.

These are outlines of the hospitals to be built in the future, the practical success of which is demonstrated in many ways. The inebriate hospitals of to-day are struggling in this direction amid difficulties that would crush out any other work not founded on great principles. The legal power of restraint is limited to months instead of years. Nearly all these hospitals are wanting in location, surroundings, and means of support, except from the income of patients. Means and appliances for occupation and thorough medical care are wanting in many cases. Public sentiment and friends of patients will not sustain the physician in his efforts and methods of treatment. False pride in the friends of patients keeps them away from all hospital treatment, until they are beyond reasonable hope of restoration. Then, as a last resort, they are sent to such places, expecting some extraordinary change. These are only a few of the great difficulties which beset all hospitals for this class, and yet unmistakable evidence indicates a large percentage of positive cures. All authorities agree that over 20 per cent. of all cases treated by the most imperfect means and appliances are cured. The nature and character of inebriety is so largely unknown that its treatment will vary with the hospital and its management. Enthusiasts and non-experts occupy the field in many cases, and try methods of treatment that wider intelligence would condemn. There are three classes of hospitals for inebriates in this country. The first recognises the disease of inebriety, and aims to treat it on thoroughly scientific principles. The second class treats these cases as half disease and half vice, giving prominence to moral means over all physical remedies. The third class are the specific physicians, who adopt special remedies, which are empirical and unfounded on any sound knowledge of such cases. The treatment, like the study of inebriety, is passing through the stage of empiricism; yet, with all the confusion and ignorance which of necessity surrounds these efforts, the actual results far exceed the most reasonable expectation. It may be safely said that no medical field presents more difficulties for the student, as it stretches along the frontier land of sanity and insanity; and no medical field promises grander results in the redemption of the race and requires a higher order of talent than the study and treatment of inebriety. These are some of the teachings of science, which are like head-lights far above the mists and fogs of theory. From these points we shall discover the sources and forces which develop inebriety and indicate the means of cure and prevention. From this standpoint the possibility of restoring the inebriate and stamping out inebriety is only limited by our want of knowledge of the laws and means to accomplish this end. Pausing on the confines of this almost unknown realm of mental disease, and looking over into the darkness of theory and temperance agitation, and empiric efforts to know and cure this disorder, we are assured that here, as elsewhere, the same eternal reign of law and order exists. Here we shall find the same causes and effects, the same circumstances and conditions, which are active in developing the epileptic and the insane, the inebriate and the criminal, all following some unknown lines and obeying some unknown forces as fixed and eternal as that which governs the planets. Along this border line science is gathering its forces, and, like the problem of the stars, its mysteries can only be solved along the line of accurately observed fact.

THE SANITARY REGISTRATION BILL. — At the ordinary meeting of the Council of the Sanitary Assurance Association, 5, Argyll-place, Regent-street, on Monday last, Sir Joseph Fayrer, K.C.S.I., F.R.S., in the chair, the following resolution was unanimously passed, on the motion of Mr. H. Rutherford, seconded by Mr. Andrew Stirling:—"That the principle of the Sanitary Registration of Buildings Bill—viz., that the law should forbid any building being used for public or semi-public purposes, unless and until the arrangements for the water supply, drainage, and ventilation of such building shall have been certified as satisfactory by some qualified person—having been very widely approved, a determined effort ought to be made to pass the Bill into law during next session, and in order to facilitate its progress in Parliament it will be desirable to introduce the measure in the House of Lords."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quampluriumas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

A SERIES OF RENAL CASES, WITH REMARKS.

(Under the care of Mr. HULKE.)

THE cases which we publish below are illustrative of renal conditions which come under the care of the surgeon for treatment. The remarks made by Mr. Hulke on each case point out the special points of interest; but we would especially draw attention to Case 4, where the patient recovered from a condition which was at one time regarded as hopeless. The cases are reported by Mr. G. S. Ware, house-surgeon.

CASE 1. *Severe blow in the loin followed by copious and long-continued hæmaturia; scalp wound; concussio cerebri.* A well-grown, muscular labourer was admitted into the Founder ward on Dec. 14th, 1886, suffering from concussion of the brain and scalp wound. In addition to these injuries he had a bruise on the left loin. He was said to have fallen headlong off a scaffold twenty-eight feet above the ground, and to have struck his left side on a projecting beam. The first urine voided contained a very large admixture of blood, and the hæmaturia continued, with slight variations in the quantity of blood, until the 25th of the same month, when an evident decrease was first noted, coincidently with the exhibitions of acetate of lead in doses of three grains every three hours. Visible traces of blood did not, however, finally disappear from the urine until Jan. 3rd, about which date a small quantity of pus was noticed in it, and a few hyaline casts.

Remarks by Mr. HULKE.—It hardly admits of doubt that the source of the hæmorrhage was the kidney, this organ having sustained some degree of laceration, for the amount of blood was too great to have proceeded from the ureter, and there was not anything to suggest a vesicular origin. That such lacerations of the kidney are not necessarily fatal without operative intervention is, it is believed, abundantly established by experience, and they do not necessarily demand nephrectomy; presumably this should be restricted to the severest forms of injury. In this and in other similar cases acetate of lead has appeared to be decidedly useful.

CASE 2. *Hydronephrosis treated by tapping.*—On Jan. 14th, 1885, a maidservant, aged thirty-three, was transferred by Dr. Cayley to Mr. Hulke's charge for the exploration of an abdominal swelling. The left half of her abdomen was occupied by a swelling which reached from the vertebral column forwards to about an inch and a half beyond the middle line in the level of the umbilicus, from which point its anterior border extended downwards to within one inch of the anterior superior spina ilii. The whole area thus defined was dull, and it fluctuated distinctly. A narrow resonant band intervened between it and the hepatic dulness, and the left inguinal region also gave a clear note. A vaginal examination established the separateness of the abdominal swelling from the pelvic organs. The urine was scanty, the total quantity voided on three successive days being 16 oz., 13 oz., and 12 oz.; its specific gravity was 1028; its reaction was slightly alkaline. The woman stated that she had enjoyed fair health, and had never had any serious illness until the present. She had first noticed her abdomen to be swollen only a month previously. She herself had attributed this to "wind." Two doctors had seen her, one saying she had "distension of the bowels," the other that she had dropsy. The cyst was emptied by aspiration through the loin, 22 oz. of fluid being drawn off. Its colour was greenish yellow; its specific gravity 1022; its reaction slightly alkaline; boiled with nitric acid it gave a copious precipitate of albumen. The only formed elements noticed in it were a few squamous epithelial cells, some leucocytes, and red blood-corpuscles. It was quite devoid of urinous odour. After the operation she expressed herself as being much relieved,

and on Feb. 2nd she returned to the medical ward, from which she was discharged convalescent on April 20th.

Remarks by Mr. HULKE.—Its situation, unchanged by posture, the entire absence of resonance posteriorly, its proved independence of the other solid abdominal viscera and of the pelvic organs, collectively afford a very high degree of probability that the swelling was a renal cyst. The character of the fluid drawn off does not negative this supposition, since in advanced stages of hydronephrosis the fluid is certainly in some instances distinctly albuminous and wanting in urinous smell, and the date of origin after cystiform dilatation of the kidney may have long preceded the time of discovery of the swelling. The result, even if it should not prove permanently good, justifies the propriety of the treatment by aspiration.

CASE 3. *Renal calculus; pyonephrosis; lumbar incision; subsequent extraction of the stone.*—On Jan. 27th a charwoman, aged forty-six years, who had been admitted into the hospital under Dr. Cayley, was transferred to Bird ward for operative treatment. At that date the right half of the abdomen was occupied by a swelling, which extended forwards from the vertebral column to slightly beyond the middle line, and reached downwards from the hypochondrium nearly to the groin. This entire area was dull, and throughout it fluctuation was distinct. Between its upper edge and the liver, and also between its lower limit and the pelvic brim, was a narrow resonant interspace. The reaction, the specific gravity, and the average daily quantity of urine were normal. The patient stated that twenty years previously she had first had an attack of pain in the right loin, accompanied by vomiting; and at that time she was told that she had a stone in the kidney. From that date she had seldom been long without lumbar pain. Ten years ago, during such an attack, she first noticed a swelling in the loin. She was not aware whether at any time her urine had contained pus or blood. Her present symptoms, together with her history, were considered to indicate a cystic dilatation of the kidney, presumably due to calculous obstruction, but they did not appear sufficient for the differentiation between hydro- and pyo-nephrosis. The absence of pyrexia favoured the former supposition. On the 28th of January a renal cyst was opened by lumbar incision, giving escape to a very large quantity of a thin, slightly opalescent fluid, after which the edges of the opening in the cyst were easily brought to the surface of the external wound and stitched to the skin. Neither with the finger passed into the cyst nor with a long probe could a calculus be detected, but the cavity was so large that its exploration was necessarily very incomplete. With the exception of a transitory rise of temperature to 101·6° F. on Feb. 1st—coincident with the occurrence of a slight blush of redness of the integument between the wound and the crista ilii, which soon disappeared—the temperature remained normal. A few days later a slight cystitis and also diarrhœa supervened; these also quickly passed off. On March 31st, the external wound having closed except at the exit for the drainage tube, a calculus was felt with a probe, lying not far from the surface. Two days later this was easily extracted. It broke into several pieces, and by an oversight these were unfortunately thrown away before they had been carefully examined in respect of their constitution, and before they were weighed; their aggregate bulk probably equalled that of a pigeon's egg. After this the patient made rapid progress, she was soon allowed to leave her bed, and she was shortly afterwards sent into the country to a convalescent home. On her return to the hospital to report herself, in the early summer, her condition and appearance were so improved that at first she was not recognised. A small indiarubber apparatus efficiently protected her dress from a scanty escape of urinous fluid from a fistula in the scar. She found her condition so tolerable that she would not entertain any idea of further operative procedure.

Remarks by Mr. HULKE.—In the feeble condition in which the patient was on Jan. 28th it may well be doubted whether she would have survived the shock and the later risks incidental to removal of the immense renal cyst by abdominal section, and the selection of treatment by lumbar incision and drainage may claim to have been justified by the result. The large size of the calculus, and the ease with which it was felt and seized when by the contraction of the cyst it had been brought towards the external wound, favour the supposition that it had been impacted in the pelvis of the kidney, and had not passed into the ureter. The most important lesson deducible from a review of the whole history of the case is the propriety of recourse to operative procedure directly the diagnosis is established and before the structural integrity of the kidney is seriously impaired. Had this been done in the present case, many years of suffering and broken health would have been averted. It has been abundantly established by experience that exploration of the kidney through a lumbar incision for the detection of a calculus, unless attended with inordinate roughness of manipulation, entails relatively small risk, and that the danger of a judiciously performed nephro-lithotomy is not very much greater, whilst the gain from a successful extraction of a calculus can scarcely be over-estimated.

CASE 4. *Pyonephrosis; consecutive post-renal abscess; extreme irritability of urinary bladder; lumbar incision for drainage of abscess and renal cyst; later exploration of urinary bladder by external urethrotomy.*—S. G——, an extremely emaciated, pale, very feeble youth, aged about fifteen years, whose whole aspect bore witness to long and severe suffering, was admitted into the Founder ward on Feb. 12th, 1884. At that date the right half of his abdomen from the vertebral column behind to the middle line in front, was occupied by a swelling, which throughout its whole extent fluctuated and was dull on percussion. Its anterior border descended almost vertically from the ensiform cartilage to the umbilicus, from which it extended obliquely towards the anterior superior crista ilii. No resonant interval occurred between this swelling and the area of hepatic dulness. In the right line was an evident unnatural fulness, and there fluctuation was very distinct. The patient complained but little of his loin and abdomen, and referred his sufferings, which were very great, chiefly to the glans penis. His urinary bladder was very irritable, expelling its contents with straining at short intervals, seldom exceeding ten minutes. Examination of the bladder with a sound, and exploration of its base with the finger through the rectum, yielded a negative result. The urine had a slightly acid reaction; its specific gravity was 1020; it contained a trace of pus and albumen. The boy said that his illness had begun, about three years previously, with severe pain in the right loin, darting thence down the thigh, and that after this blood and matter had been noticed in his urine. A very large quantity of pus was evacuated by a lumbar incision, opening, as was thought, the cystically dilated suppurating kidney. Neither with the finger nor sound could a calculus be detected. A large drainage tube was inserted. This was followed by marked relief, and his general condition manifestly improved; but later, in the first week in April, the penile pain returned, and the irritability of the urinary bladder greatly increased. The incision, which had contracted around the exit for the drainage tube was extended, and the cavity again explored. It then first became apparent that the space directly drained by the tube was not the dilated kidney, but that of a very extensive post-renal abscess communicating with a still larger renal cyst through a small opening in the back of the kidney. Through this opening, when dilated, the finger entered a renal cyst too large to allow its extreme limits to be fully traced. No calculus could be discovered. The escape of many ounces of pus proved the previous drainage to have been imperfect. A large drainage tube was passed into the kidney. The relief following this better drainage was very distinct; but again, a few weeks later, very great penile pain returned, and with this the recurrence of excessive irritability of the urinary bladder, the uncontrollable urgency to micturate at intervals of only a few minutes, was quickly exhausting his little remaining strength. On June 25th the interior of the urinary bladder was explored with the finger through an external urethrotomy, but nothing abnormal was detected unless it were two little hard knots in or under the mucosa of the anterior wall, which it was conjectured might be miliary tubercles. An attempt to sound the lower end of the ureter through its vesical orifice was unsuccessful. Nothing abnormal was discoverable by the finger in this situation, and no calculus could be felt with a long probe passed from the loin downward in the direction of the ureter until it nearly approached the finger in the bladder. A large drainage tube was placed in the renal cyst, and another in the bladder through the perineal incision. Again some relief was obtained. The penile pain and vesical irritability lessened; his appetite improved; he regained strength, so that on August 1st he was able to leave his bed, and a few

days later was taken into the garden. After this his condition quickly improved, and on August 20th he returned home. At that time the discharge from the loin was slight; a minute fistula remained in the perineum, through which occasionally a few drops of urine escaped; and the irritability of the bladder had greatly abated. In the following November he re-entered the hospital in a condition of extreme weakness, having then obstinate diarrhœa, marked enlargement of the liver and spleen of an amyloid character, and highly albuminous urine. The lumbar opening discharged daily about one ounce of pus devoid of urinary smell. In this condition further operative procedure appeared only likely to hasten the end, and in February, 1885, realising that his recovery was not expected, he expressed the desire to return to his home, which was acceded to. Contrary to expectation, he did not die, but came two or three times in the course of 1886 to see the ward sister (who had been most kind and attentive to him), and each time he appeared to be in better health. On June 3rd, 1887, he was seen and examined by Mr. Hulke's house-surgeon, who made the following note of his condition at that date:—"The boy presented himself on June 3rd, and was found to be in apparently good health. He stated that he passed urine regularly. There was a small sinus in the right loin. He said that at intervals his loin swelled there and discharged."

Remarks by Mr. HULKE.—The impaction of a renal calculus obstructing the pelvis of the kidney or ureter, cystiform dilatation of the organ, pyonephrosis, and latterly the formation of a large abscess behind the kidney, comprise the chain of circumstances suggested by the history of the patient's illness and by the symptoms present at the date of the lad's first entry into the hospital. Upon a review of the whole case as now recorded, the question forces itself upon the reader's consideration whether, in the first instance or subsequently, instead of the more limited procedure of lumbar incision and drainage, it would not have been better practice to have combined with this measure the extirpation of the cystiformly dilated suppurating kidney by an abdominal section. It was obvious that such extirpation, if practicable, could only have been performed by abdominal section in the presence of the circumstances already existing when the lad first entered the hospital. In view of the unavoidable purulent contamination of the peritoneal cavity and the great shock inseparable from so extensive and severe an operation, the procedure adopted seemed at the time the only prudent course. The non-detection of a calculus may not be taken as implying that such had never been present, causing the obstruction which, it is assumed, led to the cystiform dilatation of the kidney, because the cyst was so very large that a stone enclosed in it might easily have eluded discovery by the finger and sound, or it might have escaped from the kidney when the large post-renal abscess formed, and been lost in this. It must be allowed that there was no absolute certainty that the probe passed from the loin towards the urinary bladder actually traversed the ureter, although the ease with which it took the course of this tube favoured the supposition that it did so. When seen by the house surgeon in June last the youth's condition had so improved, it had become so tolerable, that he would not allow any examination of the sinus in the loin with a probe, nor would he consider the probability of further operative measures.

CITY OF LONDON INFIRMARY.

RETENTION OF URINE PRECEDING APOPLECTIC ATTACKS.

(Under the care of Mr. W. GEM.)

THE following cases illustrate the above heading.

W. S——, aged sixty, labourer, of temperate habits. Has had rheumatic gout for some years. Was admitted into the infirmary in 1882, and has been readmitted off and on ever since for rheumatic gout. Heart sounds normal, but has atheromatous arteries. Has had iritis, but no other defect of vision. Urine normal. Suffered from retention for six days, after which he had a severe apoplectic attack, with consequent left hemiplegia.

C. E——, aged forty, carman. Intemperate. Had rheumatism for some time. Was admitted in 1882, and has been readmitted off and on ever since for rheumatism and cardiac valvular disease. Has albumen in urine, but sight is good. Had retention for seven days, followed by an apoplectic attack and right hemiplegia.

W. C——, aged fifty-seven, labourer. Intemperate. Had rheumatic gout for some years. Admitted for such in 1885. Heart sounds normal. Double optic neuritis, but urine normal. Had retention for ten days, after which he had a severe apoplectic attack and complete left hemiplegia.

G. W——, aged forty-nine, baker. Habits not known. Admitted for melancholia, and was transferred to an asylum. Being discharged some time after on trial, he was readmitted for subacute rheumatism. Heart sounds normal. Sight not ascertained (too restless). Urine normal. Had retention for four days, and then had an apoplectic attack, with subsequent right hemiplegia.

All the above cases were treated as follows:—Perfect rest, blistering the nape of the neck, croton oil, and warmth to feet, *plus* the following drugs—bromide of potassium, decoction of aloes, and compound spirits of ammonia; followed up afterwards with the iodides. The very best results were obtained by this treatment, with the exception of the last case, which is recent.

Remarks by Mr. GEM.—It is with reticence I bring forward the above cases, as such may have been discussed in the ephemeral literature of the day. The drugs above mentioned need no comment from me, as their actions are too evident, but I may say that I have had the most favourable consequences from them in two cases I anticipated, where retention had been complete for two or three days. The query of course arises, Would such cases have gone on to an apoplectic attack? I have every reason to suspect such an unfortunate accident, as the one patient had an intense localised headache, with retinal hæmorrhages; the other not so well marked. The first one was readmitted after some time with a recent hemiplegia, showing that such an untoward event had been previously warded off.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Compound Comminuted Fracture of Lower Jaw, with Rupture of Nerve.—Central Fibro-sarcoma of Tibia.—Congenital Inguinal Hernia.—Cyst of Cerebellum and Adrenal Body.—Lardaceous Disease in Congenital Syphilis.—Congenital Hydronephrosis.—Adenoma of Mamma, with supervention of Scirrhus.—Separation of Upper Epiphysis of Radius.—Fracture of Lower Epiphysis of Femur, with Bony Union.

AN ordinary meeting of this Society was held on Tuesday last, Sir James Paget, Bart. President, in the chair.

Mr. GODLEE read the report, signed by Dr. Norman Moore and Mr. Clutton, on Dr. Jacob's specimen of Tumour of the Skull. They found genuine myxomatous tissue, but nothing sarcomatous; the diploë was the seat of origin of the growth; and the report therefore accepted Dr. Jacob's opinion that the tumour was a myxoma.

Mr. SPENCER showed a specimen of Compound Comminuted Fracture of the Lower Jaw, in which the inferior dental nerve was torn; the latter accident was rare. In this case direct violence caused the fracture in a woman aged fifty; it was vertical fracture; there was extreme pain for some time, and anæsthesia of the chin and parts supplied by this nerve. There was no displacement of the fragments, and no bleeding from the inferior dental artery. In reply to Sir James Paget, Mr. Spencer said that the necrosed portions came away during the healing; and in reply to Mr. Godlee, he said he could not say whether the teeth were anæsthetic or not.

Mr. FREDERICK EVE showed the Macerated Bone and a Central Fibro-sarcoma from the Tibia, with extreme Cystic Degeneration. There was much cholesterine in the fluid contents. The solid part was partly fibrous, partly sarcomatous, and partly had undergone mucoid degeneration. It came from a man aged twenty-four; the tibia had been fractured ten years before, and the tumour grew at this site. He had never seen so much fibroid conversion of a sarcoma before, except in those developed in the jaw; the extreme systic degeneration was also rare. The specimen reminded him of that shown by Mr. Bilton Pollard two years ago, in which case the Morbid Growths Committee could not decide the inflammatory or sarcomatous nature of the tumour of the tibia.—Sir JAMES

PAGET remarked on the long period of time that elapsed between the traumatism and the tumour.—Mr. BOWLBY related a case of a child aged three, in whose tibia there was a central sarcoma expanding the bone. From the centre of this some fluid was removed from a large cavity in the upper third of the tibia. After the operation of removal of the fluid the child gradually improved and the bone healed up. He asked for information as to the laying open of such cases.—Sir JAMES PAGET referred to his paper on the Enucleation of Tumours from Bone, and in this there were, he believed, cases of large cysts containing blood, which were emptied and did well. In one case of Mr. Thomas Smith's in which laying open was practised the case did well, and the child remained well, and was, indeed, still living.

Mr. BLAND SUTTON exhibited and made some remarks on two specimens of Congenital Inguinal Herniæ in Monkeys. He stated that, with the exception of the gorilla and some chimpanzees, man is the only mammal in which the funicular process of the peritoneum becomes normally obliterated above the testis. If, as some surgeons maintain, a patent funicular pouch predisposes to hernia, it should be very frequent in monkeys. This, however, is not the case, for out of more than 800 monkeys he had examined post mortem, only three presented herniæ—two were congenital epiplocele, the third an entero-epiplocele. Reference was made to a large inguinal hernia from a monkey preserved in the College of Surgeons, a Hunterian preparation, in which the omentum and colon occupied the sac. A re-examination of the specimen showed that the testis had a proper tunica vaginalis. Further, the sac also contained several large hydatid cysts. As a curiosity, a drawing of a hernia in a frog was shown.—Mr. JONATHAN HUTCHINSON, jun., had never observed inguinal hernia in monkeys, though he had frequently demonstrated the patency of the funicular process. He did not think that the observation could be taken to militate against the theory that the patent funicular process was a factor in the production of inguinal hernia in man, but it tended to prove that a long mesentery could not be the efficient cause. In monkeys the mesentery was always long, and could be pulled down below the scrotum; yet inguinal hernia was, as Mr. Sutton said, extremely rare.

Dr. CHARLEWOOD TURNER showed a specimen of Cystic Tumour in the cerebellum and right adrenal from a man aged forty-four, who had served as a policeman ten years, and got a good deal of knocking about. Eight years before his death he received a blow on the forehead from a brick. His symptoms commenced with headache referred to the occiput and forehead eighteen months before his admission to the hospital, with failure of sight and deafness of the right ear, and vomiting. He subsequently had incoördination of movements, with a tendency to fall to the right side. He became dull and torpid, and died in coma. There was a tumour at the right border of the cerebellum, and another on the upper surface, contiguous to the anterior part of the middle lobe, which it had compressed. The centre of each tumour was occupied by a cyst. The growth consisted of a fine reticulum, with round and elongated nuclei, traversed by a network of vessels, some of which presented varicose dilatation occupying much of the field. The right adrenal was converted into a tumour of the size of a fist, which consisted of a large cyst surrounded by a wall of growth, having an adenoid structure resembling that in the cerebellar tumour, but more fibrous. There was a cyst in the liver containing clear fluid and cholesterine, and there were several cysts in the left kidney. This wide-spread cystic disease was interesting, and in a case recorded by Dr. Pye-Smith in vol. xxxvi. of the Transactions there was a simple cyst in the cerebellum, associated with small cysts in the pancreas and kidneys.—Dr. HALE WHITE said it would be interesting to know whether the patient was insane, because in some of the insane general cystic degeneration was found, as had been communicated to the Society by himself and Dr. Savage in their paper on Holes in the Brain.—Mr. STEPHEN PAGET said that he had found that the suprarenals were involved with secondary growths in cases of cancer, and these organs were symmetrically affected, and yet when they were involved the kidneys escaped. He asked which was the primary disease in Dr. Turner's case.

Dr. HALE WHITE showed specimens of Congenital Syphilis causing lardaceous disease of the viscera, gummata, and fibrosis of the liver, and chronic peritonitis. The patient was a girl aged seven years, both of whose parents had syphilis, and who herself presented most of the signs of congenital syphilis. The liver could be felt with a hard rounded edge just above the iliac crest; the spleen reached below the umbilicus; there was some pain and tenderness in the abdomen; the left eye showed disseminated choroiditis and optic neuritis; the glands in the right axilla were enlarged, and there was a painful node over the head of the tibia; the urine was albuminous, and this decided the diagnosis in favour of lardaceous disease. She improved under treatment, but ultimately succumbed to an attack of acute tonsillitis. The liver weighed 61 oz.; it was hard, rounded, with radiating fibrous depressions all over it; there was also some cirrhosis; at the anterior part there was a gumma the size of a walnut; it was extremely lardaceous throughout, as was also the spleen, which weighed 16 oz. The kidneys weighed 12½ oz., and showed both tubal nephritis and lardaceous disease. The small intestine and cervical glands were slightly lardaceous; there were several bands of fibrous tissue indicative of old peritonitis. There was no sign of there ever having been any suppuration. The lardaceous deposit was seen very well under the microscope. This case showed three very rare manifestations of congenital syphilis: First, lardaceous disease; second, chronic peritonitis; third, fibrous scars and gummata in the liver, in addition to cirrhosis.—Dr. ANGEL MONEY said that lardaceous disease in children dying of congenital syphilis was undoubtedly uncommon; but probably lardaceous degeneration was not so rare an occurrence as might be supposed from this, for the reason that children seldom died at so advanced an age as seven years, unless from other diseases. In children under two years, when deaths were frequent, he had never observed lardaceous disease.—Dr. COUPLAND said, so far as he knew, no case had been recorded in which only congenital syphilis was operative in the causation of the lardaceous disease.—Dr. HALE WHITE thought it was rare, even clinically, for signs of visceral enlargement were uncommon and albuminuria wanting.

Dr. DAWSON WILLIAMS showed a specimen of Dilatation of the Ureters and of the Pelves of the Kidneys observed in a boy aged five and a half years. There was no history of calculus nor of any illness beyond diarrhœa until about six months before death, when a swelling, subsequently identified as the distended bladder, was first noticed. For two or three months earlier he had had incontinence. Six weeks before death he had two attacks of convulsions, probably uræmic, with partial unconsciousness. When he came under treatment at the East London Hospital for Children (Shadwell) there was slight irregular fever, the bladder was found to be habitually distended, a small quantity of urine being passed every few minutes; on one occasion Mr. Parker drew off one pint, and no urine was passed for twenty-four hours, when the bladder was again full. The urine was persistently albuminous; at a later stage much blood was passed with the urine; subsequently this was replaced by pus. Death was due to suppurative nephritis, which was found to be more advanced in the right kidney. Both organs were much enlarged, the superficial measurements considerably exceeding the average in the adult; the enlargement appeared to be due to dilatation of the calyces; the pyramids projected into the calyces, and extended quite to the surface; the cortical substance occupied the intervals between the pyramids. The collecting tubes were enlarged. The ureters were much dilated, and had the general external appearance of a coil of the ileum. The bladder was much trabeculated, and there were numerous hæmorrhages into the mucous membrane. There was no obstruction post mortem to the flow of urine from the kidney to the bladder, and pressure on the bladder caused regurgitation into the ureters and pelves. A catheter was easily passed during life, and there was no reason to suspect any obstruction. The dilatation and trabeculation of the bladder and the presence of fibrotic changes in one kidney were mentioned as facts which might be quoted in support of the theory that the dilatation had been produced by past obstruction, but for two reasons it was suggested that the case was an example of congenital dilatation of the ureters and pelves (so-called congenital hydronephrosis); in the first place there was a complete absence, both from the history and the post-mortem appearances, of any cause for the dilatation; and, secondly, the anatomical characters of the abnormal parts, which included an unusual size of the collecting tubes, seemed to favour the theory of an error of development, because the ureters, pelves, and collecting tubes were developed from the same mass of blastema, the collecting tubes growing out from the ureter into the metanephric blastema.—Mr. GODLEE thought such cases were

most puzzling to explain; chronic catarrh or stone could not have been the cause, for the bladder was greatly hypertrophied.—DR. HALE WHITE referred to a card specimen shown at the last session.—MR. BLAND SUTTON agreed with the view that it was a case of congenital hydronephrosis.—DR. ANGEL MONEY concurred in the view, and mentioned a case of lipæmia in which there was congenital hydronephrosis on the left side, and a fibrous atrophied kidney on the right side. There was doubtless an intra-uterine want of vitality, which led to various errors of development in different directions.—DR. DAWSON WILLIAMS, in reply, remarked that the two kidneys in his case were different, one being more fibrous than the other.

MR. JONATHAN HUTCHINSON, jun., after quoting Sir James Paget's statement that cancerous disease had never been observed to occur in adenomata of the breast, said that the patient's mother had an adenoma of the breast at the age of fifty-four. The daughter had noticed a tumour of the breast for many years, but it began to grow at the age of forty-four. The original tumour was an adenoma, while round it was a scirrhous growth of the round-celled variety, which in parts infiltrated the adenoma; but it could not be determined whether the scirrhous growth started in the adenoma or not.—MR. EVE had described a similar specimen from St. Bartholomew's museum. The growth was a scirrhus except in the centre, where it included a nodule of adenoma.—THE PRESIDENT said he had never met with a case in which adenoma had disappeared; he thought it very proper to advise their removal, as he had seen several develop into recurrent fibro-cystic tumours.

MR. MANSELL-MOULLIN showed a specimen of Separation of the Upper Epiphysis of the Radius. The injury that caused it had greatly torn the forearm of a boy aged sixteen. The solution of continuity took place between the cartilage of the epiphysis and the bone of the shaft. The orbicular ligament was much torn. He also showed a specimen of vertical Fracture through the Lower Epiphysis of the Femur, which had united by bone, also from a boy aged sixteen, who had sustained one year previously a compound fracture into the knee joint; afterwards a swelling formed in the popliteal space, which became quite full, and there was distinct pulsation, which led to the diagnosis of arterial hæmatoma. Suppuration into the knee joint led to amputation through the lower end of the femur, when it was found that the fracture had united obliquely, and that a fragment had caused ulceration of the popliteal artery, hence the hæmatoma. The popliteal vessel was ligatured in two places, but this was followed by suppuration into the knee joint. After maceration the lower epiphysis separated at the epiphysial line.

CLINICAL SOCIETY OF LONDON.

Suprapubic Drainage of the Bladder for Enlarged Prostate.—Prostatectomy by the Suprapubic Incision.

AN ordinary meeting of this Society was held on the 11th inst., Dr. W. H. Broadbent, F.R.C.P., President, in the chair. A most interesting evening was spent in the discussion of the Surgical Treatment of Enlarged Prostate.

Sir HENRY THOMPSON read a case of Enormous Prostate; vesical calculi, free and encysted; urine passed for years by catheter, but now by suprapubic tube, without any catheter, for a year and a half; patient in excellent health. The following is an abstract:—"A gentleman, aged sixty-four, applied to me on April 21st, 1885. All urine was passed by catheter, used sixteen times in twenty-four hours; there being symptoms of stone, verified by sounding, I advised lithotrity.—April 24th: Under ether I unexpectedly found stricture of urethra, which was forcibly dilated by conical metal instruments from No. 8 up to 13 to admit lithotrites &c., enabling me to remove a phosphatic calculus, weighing 142 gr., at one sitting. He soon improved, and used the catheter now only eight times daily. In the autumn severe symptoms reappeared, and he came again. Finding no adequate cause, after consultation with Dr. George Johnson, I decided to perform digital exploration of the bladder through the perineum, and did so on Nov. 4th. The prostate was so large I could barely reach the neck of the bladder with my finger, still sufficiently so to discover there a collection of calculi, evidently movable in a sac. Opening this with the scalpel, I removed six, each with facets, the effects of packing (exhibited). Nothing had been left in the bladder from the previous operation. At the same time the stricture, which had rendered his daily catheterism troublesome, was now freely divided by the knife. He made a good recovery, but the relief was not great. He soon began to pass much phosphatic grit, and suffered greatly, taking morphia largely in consequence; and before the early spring of 1886, having spent that winter in a warmer climate, he required hypodermic injection daily, while catheterism was required more frequently than ever. I advised the suprapubic section and the placing of a tube permanently there as the only chance of saving him, and, if it answered, of rendering his existence comfortable. His friends advised him to decline my proposal for the present, but in the end of April he came to me, regarding life as unendurable, and begged me to do whatever I thought best.—April 29th: Dr. G. Rice Ord, of Clapham, and others present, I performed the high operation, finding the prostate enormously large, and interior of bladder coated with an adhering fibrinous layer containing much phosphatic deposit. I peeled off the layer with some trouble, leaving the bladder quite free from adhering matter. A tube was placed in the wound by which all the urine issued, and he rapidly improved from the cessation of catheterism and pain. In three or four weeks, when he had thus regained health and strength, I adapted a silver plate to the suprapubic region with an opening, admitting a silk gum tube, No. 20 English scale, and consequently very large, one end being in the bladder, the other projecting half an inch from the outer surface of the plate, and attached thereto an ordinary urinal worn in the usual manner. After a few experiments and adjustments, this answered perfectly, and all the attention necessary now was its removal and cleansing once a day, and washing out the bladder, all which he learned to do. He soon left for Brighton, discontinued all opiates, went abroad for the winter of 1886-87, and wrote me last spring that he is 'able to walk two miles, and to be out an hour at a time; the urine good in colour and clear, passing through the tube at night, and not interfering with sleep.' He has not used the catheter since. He called on me soon after, looking the picture of health, cheerful and happy. A few months later he wrote me that the wound had contracted somewhat, and that he had hurt himself by forcibly attempting to push in the tube, and partially lost the route. I advised him to come up at once, and he did so. Giving him ether, I enlarged the wound a little and re-established the channel, and he left me in a few days, the old system being re-established with the same freedom as heretofore, having never at any time resumed the use of the catheter. This was in June last, and I have seen him only once since, about a week ago, in the end of October, and found him as well as ever; active, healthy, and free from pain; in every way far more comfortable than during any part of his long experience of passing urine by the catheter. I employed the suprapubic puncture first in 1860, in University College Hospital, in order to give relief to an extreme case of constantly recurring catheterism, by inserting a tube to give issue to the urine as a permanent channel, which afforded much relief; and I repeated the proceeding with more or less success in five. But a free suprapubic section, inasmuch as it enables the surgeon to detach all chronic fibrinous and phosphatic deposits which are in no other way removable, appears to me a far better method, and I propose it now for adoption in some of those exceptionally formidable developments of the prostate and associated disease of the bladder which sometimes occur, as the only chance of prolonging life and obtaining relief from terrible sufferings. Of this proposal the case reported is a remarkable illustration, while it is perhaps almost unique from the complication of morbid conditions present in one patient."

MR. M'GILL read a paper on Suprapubic Prostatectomy, and related three cases where the operation had been successfully performed. The operation consists in opening the bladder above the pubes in the usual manner, and removing with scissors and forceps that portion of an enlarged prostate which prevents the outflow of urine. Case 1 had suffered from urinary symptoms for seven years, and had not been able to pass urine without a catheter for seven months. Six calculi, weighing 174 grains, and a portion of the prostate as large as a walnut, were removed by suprapubic incision. The patient made a speedy recovery, and did not require to use a cathether. Case 2: Symptoms of prostatic enlargement for two years, acute symptoms for a fortnight, fetid urine, and frequent micturition. The patient was treated for three weeks by ordinary methods without

benefit. The middle lobe of the prostate, the size of a bean, was removed with immediate benefit. He left the hospital on the twenty-seventh day with the wound healed, and passing urine without difficulty. Case 3: Prostatic symptoms for six years. Acute symptoms of greater and less severity for three years. On admission into hospital the patient was found to be extremely ill. He vomited all his food, had constant diarrhœa, and passed putrid urine, which deposited one-third of its bulk of pus. On opening the bladder the ureters were felt to be much dilated. The projecting portion, the enlarged prostate, was removed. He made a quick and satisfactory recovery, and was able to micturate without difficulty. The benefits derived from the operation are of two kinds: first, acute symptoms are relieved by the drainage of the bladder; and second, the cause of these symptoms is removed by excision of a portion of the enlarged prostate. As yet the operation has only been practised in acute and urgent cases; it is not improbable that in the future it may be resorted to before any acute symptoms intervene.

Mr. CHRISTOPHER HEATH spoke of the great advantage of the suprapubic drainage in cases of long-standing prostatic enlargement with its consequences. He considered Mr. M'Gill's action as a new departure. Some years ago Sir William Ferguson tried the removal of enlargements of the prostate by the perineal incision as in lithotomy, but the hopes raised by this method did not appear to have been fulfilled. Mr. M'Gill's mode of treatment may be said to have opened up a great field for enterprising surgery. Mr. Heath remarked that few surgeons were familiar with the aspect of a prostate as seen from within the bladder in the natural state. He congratulated Mr. M'Gill on his success.—Mr. BARWELL raised the question whether it was safe to make wounds in the prostate and bladder whilst the urine was in a fetid condition.—Mr. HENRY MORRIS considered that theory and experience might show that the suprapubic method of removing the prostatic overgrowth might not perhaps be the best method of procedure. Sir William Ferguson and Mr. Bryant had removed portions of enlarged prostate by the perineal lithotomy section in cases of vesical calculus. The operation of removing the prostatic overgrowth through the perineum without the bladder being incised was discussed, and it appeared in a favourable light; the upper part and sides of the prostate were not to be removed, but the posterior part between the bladder and rectum; and Mr. Morris asked whether we ought not to attempt to shell out the posterior part of the prostate through the perineum, the one finger being placed in the bladder through a median urethrotomy incision; he thought by this method we might record successes without the necessity of any suprapubic operation. He referred to a case of suppuration in and around the prostate, which he attempted to heal by median urethrotomy and drainage, but without success; extensive fistulous channels formed in the perineum, and to remove irritation and promote the healing of these parts Mr. Morris performed the suprapubic operation for draining the bladder. At the operation, the fistula, which led from the bladder into the perineum, was distinctly visible on inspection through the high incision. The greater part of the perineal wound closed, but the man left Middlesex Hospital when that institution closed for summer cleaning, and Mr. Morris had not heard the termination of the case. The instrument he employed for draining the bladder through the suprapubic opening somewhat resembled that of Sir Henry Thompson's, but had the additional advantage of a ball-and-socket joint. Mr. Morris considered that in the method of suprapubic drainage we held a means for relieving cases of perineal fistulæ.—Mr. QUARRY SILCOCK supplied the previous history and sequel to Mr. Morris's case. When he first saw the man there appeared, to be an ischio-rectal abscess, which was opened and was followed by the development of much granulation tissue. After Mr. Morris had drained the bladder by the suprapubic opening, still some urine trickled away from the perineal fistula, which refused to heal despite every attention. The patient was now in a workhouse adjoining St. Mary's Hospital, and there was practically no improvement in his condition.—Mr. T. BRYANT considered the suprapubic drainage to be now proved to be of great value, and such success as has been found by its use must tend to diminish the fear of practising it. He confessed to a long liking to, and personal preference for, draining through the rectum; but he was satisfied that the bladder could be well drained above the pubes. Sir Henry's case could, indeed, only have been treated in that way, and there could be no question as to its value. Mr. M'Gill had introduced a new subject of an interesting and pleasing nature. He was not disposed to criticise so frank a paper as Mr. M'Gill's. The first case appeared to be that of a rather young man, and some doubt might be entertained as to whether a large prostate really existed. It must remain an open question as to how far the suprapubic method of prostatectomy was likely to be better than the perineal. He himself inclined to think the perineal was the best, but this must be a subject for experience. He had on two occasions removed enlarged lobes of the prostate; both were cases of lithotomy. The first tumour was removed unwittingly with the stone. The patient was alive and well seven years after the operation. In the second case, the tumour was designedly removed from the posterior part of the prostate after the removal of the stone. Eighteen months later the man was in good health. He inquired how long the first two cases (of Mr. M'Gill) could retain the water.—Mr. H. BENNETT discussed the best method of approaching the prostate with a view to its removal, and he thought the suprapubic method had advantages. He related the case of an old man aged seventy, who was admitted into St. George's Hospital, under the care of Mr. Holmes, for acute retention resulting from old prostatic disease. An incision was made through the centre of the perineum; the finger could not be passed into the bladder; the catheter was passed and the bladder drained thereby, but, nevertheless, much distress was occasioned, and the patient but little, if at all, relieved from pain. He returned later to the hospital, after having gone out and begged to have something done to relieve his distress. A suprapubic opening was made; a stone not previously detected was found and removed; many portions of the large prostate were deliberately cut away—enough to fill the palm of the hand. This procedure relieved the patient from all pain and distress, but death followed in three weeks from exhaustion, the old wound not having healed. The termination might have been different if the patient had had the suprapubic operation performed before his kidneys and general system had become so deteriorated.—Mr. BOWLBY related a case which had been under the care of Mr. Willett at St. Bartholomew's Hospital. It was a case of vesical stone removed by perineal lithotomy; a large prostate was found, and this tumour was enucleated through the perineal incision; there was no pedunculated portion, but the sessile tumour was freely removed by the aid of scissors and finger; the parts removed equalled half an orange in size. The patient was much benefited; passed urine for himself, and could retain it for several hours. He was discharged, and some time after readmitted with calculus pyelitis and cystitis, from which he died. Examination of the parts after death showed that the cavity in the prostate had contracted so as now to be only of the size of a walnut, whereas the tumour cut away had the dimensions of half an orange; practically, the whole of the prostate was removed; the parts removed, and also the bladder with its surroundings, were specimens preserved in St. Bartholomew's museum. He asked Mr. M'Gill as to the statement that the ureters could be entered by the finger palpating the bladder; such an experience was most unusual, and was opposed to the belief that under no circumstances did regurgitation take place from the bladder into the ureter.—In reply to Mr. Thomas Smith, Mr. BOWLBY said that the prostate was removed by Mr. Willett from outside the bladder.—Dr. BROADHURST thought there would still be a place for the operation suggested and practised by Sir Henry Thompson.—Sir HENRY THOMPSON, in reply, said he was much interested in Mr. M'Gill's operation, and gratified by its results. This procedure was indeed a fresh starting-point, and he should further inquire into it. He, like Sir William Ferguson, had in three recorded cases removed large portions of prostate in cases of stone. All the urine had been withdrawn by catheter in the cases in which the suprapubic operation was performed. It was not the size of the prostate that constituted the danger. A small hypertrophy might cause the greatest interference with micturition, and consequent distress. Though an enlargement be enormous, yet retention might rarely be present. In neither of the three recorded cases had there been the slightest improvement in the patient's powers of micturition or in his general comfort. They had to resort to the catheter as before operation. It was of no use to remove a large prostate of many years' standing, because the bladder had then become a mere membranous sac, not possessed of any contractile power. But in earlier

cases, as in Mr. M'Gill's, before the bladder was atonied, there was an opening for the operation of prostatectomy; he said this without endorsing the operation, which must rest its claims to recognition on its success in the future. He was disposed to think that the suprapubic method was better than the perineal for the removal of the enlarged prostate in suitable cases. He considered that the vulsellum was a clumsy instrument for the removal of portions of the prostate—this in way of criticism of Mr. M'Gill's cases. The clean-cutting instrument would be better. As to the objection to operating in the presence of fetid urine, Sir Henry said that this phenomenon was solely due to decomposition in the bladder, and that usually after draining this organ the urine in a few hours became sweet.—Mr. M'GILL, in reply, spoke of the difficulty of getting portions of the prostate away; hence he had not been able to preserve any but minute fragments, which were microscopically examined in the first case recorded, and found to be true hypertrophy of the prostate. He should devise a special pair of curved scissors with long handles, so that in future he proposed to divide the prostate into two halves and cut portions away with a clean incision. He was satisfied that prostatectomy could be done, but he himself was not sure as to which was the best way to do it. He should not employ the perineal method of removal. Doubtless Sir Henry was right in placing a limit of time after which the operation would prove useless, as the result of the atony of the bladder consequent on the long-standing prostatic disease. A drainage tube of celluloid would be less expensive than a silver tube.

MEDICAL SOCIETY OF LONDON.

Fæcal Anæmia.

AN ordinary meeting of this Society was held on Monday, Nov. 14th, at 8.30 P.M., Dr. Hughlings Jackson, F.R.S., President, in the chair.

Sir ANDREW CLARK read a paper on the Anæmia or Chlorosis of Girls, occurring more commonly between the Advent of Menstruation and the Consummation of Womanhood, which appears in full on p. 1003.—Dr. BURNEY YEO said he considered too little stress had been laid on improper feeding as a cause of this condition. He had observed cases in which there were exacerbations of fæcal absorption indicated by rise of temperature, with languor and prostration.—Dr. DE HAVILLAND HALL thought that the frequency of chlorosis in young females and its rarity in males of similar age pointed to the generative system as being primarily at fault.—Dr. THEODORE WILLIAMS admitted that constipation was one cause of anæmia, but it was not an invariable accompaniment of that condition; on the other hand, the French who were habitually constipated, did not suffer to any great extent from anæmia, and he had met with many cases of constipation in young girls who were otherwise healthy.—Mr. S. BENTON advocated small enemata of rhamnus frangulæ mixed with lemon juice, glycerine, and alcohol as an easy and rapid method of removing fæcal accumulations.—Dr. ROGERS had found the majority of these cases accompanied by menstrual irregularity.—Dr. EDIS recommended treatment by a mixture of iron, aloes, and nux vomica, combined with out-door exercise.—Sir JOSEPH FAYRER said that the form of anæmia he most frequently had to treat was dependent on splenic cachexia. As a purgative he had found the sulphate of magnesia or soda of the greatest value.—Dr. HINGSTON FOX had met with similar cases in middle-aged women with "earthy" complexions. In them the cause was obviously fæcal accumulation.—Dr. THOROWGOOD had great faith in a combination of aloes and myrrh with iron.—Dr. HUGHLINGS JACKSON mentioned some observations by Bunge and Strümpell. The former pointed out that iron in ordinary food exists in a very complex organic combination—hæmatogen. Strümpell suggests that inorganic salts of iron are useful in anæmia, by protecting the hæmatogen from decomposition by sulphides in the alimentary canal.—Sir ANDREW CLARK, in reply, said that, though the appetite was sometimes capricious, it was often very good. A daily evacuation of the bowels was often unattended with adequate fæcal relief. He regarded accumulation of fæces in the rectum as only a local and mechanical evil, but it was the retention of fæces in the colon that gave rise to constitutional symptoms.

OPHTHALMOLOGICAL SOCIETY.

Brain Disease with Hemianopia.—Iridectomy in Relapsing Iritis.—Quiet Iritis.

AN ordinary meeting of this Society was held on the 10th inst., Mr. J. Whitaker Hulke, F.R.S., President, in the chair. A manuscript copy of the library catalogue, prepared under the direction of Mr. Adams Frost, was laid on the table.

Dr. SEYMOUR SHARKEY read a paper on a case of Cortical and Subcortical Disease of the Occipito-angular Region producing Hemianopia. The patient was a hawker, aged twenty-nine, who had suffered for twenty years from ordinary epilepsy, and since from epileptic insanity. In October, 1866, he struck his head with a piece of wood on the vertex of the skull; the wound left a scar, and since that time he had not been able to use his right hand, and the right leg was noted to be weak; the right hand is said to have been rigid since, and to have gradually lost sensation. On Dec. 17th he had a fit, and was brought into St. Thomas's Hospital. His pupils were dilated and unequal, the right being the larger. There were clonic spasms of the facial muscles and rigidity of the right arm and leg. He recollected the events of the fit, and had not bitten his tongue. There was hemianæsthesia in the right side, including the special senses on the same side. Optic neuritis developed. On Dec. 11th there was right lateral hemianopia. Death occurred on Feb. 1st, 1887, and was preceded by headache, insomnia, mental dulness, passing into coma. The temperature, though previously normal, rose on the last three days before death, and reached 107·4° F. just before death. At the necropsy, a tumour, which proved to be a round-celled sarcoma, was found in the left cerebral hemisphere beneath the cortex, and occupying the occipital lobe and part of the parietal lobe. The convolutions of the anterior half of the occipital lobe, the superior parietal lobule, and the upper extremity of the angular gyrus were thinned. The posterior part of the internal capsule was not invaded, but the growth extended nearly up to this sensory crossway. The question of the relation of ordinary epilepsy to so grave a disease as cerebral tumour, and whether the conditions of the former predispose to the latter, was only mentioned to be passed by for the present. Dr. Sharkey was not clear as to the cause of the partial right hemiplegia, but considered that the growth may have damaged without invading the arm centres. The growth had involved part of the leg centres in the superior parietal lobule. The optic neuritis was ascribed to the chronic thickening of the meninges at the base of the brain (another feature of interest was the thinning of the cranial bones, especially at the base). The homonymous hemianopia was ascribed to the destruction of the cortical and subcortical region of the occipito-angular region. The extensive destruction was parallel with the experimental facts determined by Ferrier, who observed that the lesion must be extensive and complete to produce a permanent ocular defect. The concentric contraction of the visual fields was probably due to the optic neuritis. The hemianæsthesia was set down to the damage to the fibres which go to make up the sensory crossway, but which had not yet entered the posterior third of the posterior limb of the internal capsules. Therefore the hemianæsthesia and the hemianopia may be ascribed to damage of the sensory radiations into the temporo-sphenoidal and callosal regions, and the optic radiations of the occipito-angular region. Dr. Seymour Sharkey also read the sequel to the case of hemianopia recorded by him in the fourth volume of the Transactions of the Society, p. 276. The patient had had a series of epileptic fits associated with visual phenomena, and almost certainly due to discharges commencing in the motor cortex, and spreading thence into the visual area or occipito-angular region. In December, 1886, all signs of paralysis had disappeared, but the area of blindness remained practically the same as before (Nettleship). This case was like other cases of hemianopia that Dr. Sharkey had seen, in that the symptom persisted for a long time without change, and without being associated with other morbid nervous phenomena.—Mr. NETTLESHIP could call to mind at least four cases of hemianopia which remained stationary for at least three or four years. In one case of a man the hemianopia had lasted at least ten years, and there was perhaps a peculiar intellectual state, for the patient invariably denied having been

seen previously.—Dr. KRALL had not observed special mental defects in cases of hemianopia.—Dr. J. ANDERSON thought that some cases were accompanied by mental change, and others were not; perhaps hemianopia of cortical or subcortical origin was more likely to be accompanied by mental alterations.—Mr. NETTLESHIP referred to cases of hemianopia of sudden onset, and apparently due to basal lesions, and asked how such cases were to be explained.—Dr. SHARKEY, in reply, said that in the case of which he had read the sequel, the conclusion might legitimately be drawn that the hemianopia was of cortical origin. He had not observed alterations in the veracity of hemianopic patients. If the hemianopia were due to basal lesions, the other sensory fibres lie so closely to those which subserve vision that they could hardly escape; nevertheless, affection of the special and other senses might be overlooked; and later in the cases compensation might have been established.

Mr. NETTLESHIP read a paper the object of which was to obtain as close a definition as possible of cases of Relapsing Iritis in which there was reason to think that iridectomy would have the effect of preventing further attacks of the disease. It was shown that relapses of iritis were due much less to the presence of adhesions than to the constitutional cause of the disease, since syphilitic iritis did not relapse, whilst forms of rheumatic inflammation of the eye without iritis relapsed in exactly the same way as rheumatic iritis. Putting aside as usually unsuitable for iridectomy cases with keratitis punctata, and cases where the iris was very extensively adherent and yet softened (parenchymatous iritis), and regarding cases as unfavourable which were complicated with high myopia; and, on the other hand, assuming the necessity of the operation in cases where iritis with circular synechia had led to bulging of the iris,—the operation was next considered as preventive of future active attacks rather than of the consequences of past disease. In this relation he believed that whilst the effect of iridectomy in preventing future attacks of iritis had, chiefly owing to Von Graefe's teaching, been considerably overrated, the operation, in properly selected cases, very seldom did harm, and sometimes undoubtedly did good. Observation of cases not operated on showed, however, that very long intervals occurred between successive attacks, and that the disease tended to wear itself out with time; whilst, on the other hand, it was not uncommon to meet with cases which had relapsed as much after iridectomy as before. Taking into account these and other sources of error, the conclusion was arrived at that iridectomy for recurrent iritis should be resorted to only after a very patient trial of all other means of treatment. Cases were given in illustration of all the more important statements.—Mr. PRIESTLY SMITH doubted from his own experience whether Von Graefe's dictum was generally true. When glaucoma seemed imminent he would perform iridectomy, but till then treat the cause of the iritis. Salt baths, acting on the skin, were perhaps the best means of treatment in these cases of recurrent iritis—better than mercurials and other alterative treatment. A tonic treatment, with change of air at Droitwich, with its salt baths, was very good. Iridectomy was powerless to cut short the tendency.—In reply to Mr. Juler, Mr. NETTLESHIP said that in cases of serous iritis, with keratitis punctata, he thought iridectomy was not required; and in other cases where the iris was infiltrated, the iridectomy was not likely to prove of benefit. In cases where complete adhesion forms a circular synechia, iridectomy was called for, and generally did good. But he could not say which cases of relapsing iritis would, and which would not, be benefited by iridectomy.—Mr. J. HUTCHINSON, jun., related several cases of Quiet Iritis, in which the attack, sometimes leading to extensive adhesions to the lens, and involving much deterioration of sight, was from the first unaccompanied by the typical features of inflammation. It was, perhaps, not sufficiently known that iritis in certain cases did not reveal its presence by the characteristic frontal pain, and was practically unattended by congestion or photophobia, though the fact had been pointed out by various ophthalmic surgeons. He had tabulated thirty-seven examples of quiet or insidious iritis, and from these deduced the following conclusions: 1. Sympathetic inflammation, congenital syphilis, and inherited arthritic (gouty or rheumatic) tendency are probably the most frequent causes of quiet iritis. 2. This form is very rare in the iritis of acquired syphilis, that of the ordinary rheumatic type, and in traumatic or herpetic iritis. 3. Sex and age have little or no influence in modifying the severity of the symptoms accompanying iritis. 4. That a constitutional tendency cannot always be invoked as the reason for iritis taking on an insidious form is shown by the occasional occurrence of two attacks in the same patient, one being accompanied by violent inflammatory symptoms, the other perfectly quiet throughout. 5. The absence of the ordinary symptoms of iritis by no means always implies a mild course of the disease, some of the cases going on to complete blindness of the affected eye.—Mr. J. B. LAWFORD said that it would be difficult to tell whether the quiet iritis were relapsing or not, if the pigmentation on the lens were the chief evidence of past mischief. Cases might originate congenitally or even during intra-uterine life.—Mr. HUTCHINSON, in reply, thought that the cases might originate during intra-uterine existence; in one case a traumatism was the cause; but the iritis was silent, and was only manifested after the use of atropine by the presence of uveal pigment on the back of the lens.

The following living and card specimens were shown:—

Mr. QUARRY SILCOCK: Case of Choroido-retinitis with Opaque Nerve Fibres and Keratitis Punctata.

Dr. POULET WELLS: Localised Secondary Pigmentation of Retina in Distribution of Plugged Branch of Central Artery.

Mr. KRALL: (1) A case of Congenital Small Lens (?)—Mr. Juler considered that the lens was present of usual size, and on its posterior surface there was an opacity. (2) Semicircular Hæmorrhage, not at the Macula Lutea.

Mr. DOYNE: Recurrent Œdema of Upper Eyelids in a young woman who had not menstruated; it had lasted fourteen months; megrimous headache had appeared for the last two months.

Dr. MULES: (1) An Evisceration Scoop; (2) an Instrument for Inserting the Artificial Globe used in his method of operation. Made by Mr. Armstrong of Manchester.

Mr. JULER: A new Apparatus for Illuminating the Perimeter.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

President's Address.

A MEETING of this Society was held on Nov. 9th, R. Thorne Thorne, M.B., F.R.C.P., President.

In dealing with the subject of the Progress of Preventive Medicine during the Victorian Era in his inaugural address to the Society, the President expressed the opinion that there were but few phases in the great progress which had marked the Victorian era that had had a greater effect for good than that which had been concerned with improvements affecting public health, and he contended that intelligent action in this direction had been largely based on the development of preventive medicine and epidemiology. Up to the date of the Queen's accession the first requisite to a proper understanding of the etiology of disease—namely, the registration of the causes of death—was wanting. With 1836 came the civil registration of deaths, and at once some insight was acquired as to the incidence of disease on condition of life and locality; and between 1838 and 1840 it became evident that wide-spread epidemics of small-pox, scarlet fever, and "fever," a generic term including all our continued fevers, were prevailing. It was also found that in English towns and cities the general mortality was greater by 44 per cent. than in country districts, and that this excess was largely capable of remedy. Tracing the history of certain preventable diseases during the past fifty years as typical of the progress made, reference was made to the adoption in 1840 of the system of public vaccination, by which "all persons" could claim to be vaccinated at the public cost, and it was shown stage by stage how it was reserved to this era to extend and elaborate that system under the Vaccination Acts passed between 1853 and 1871. The effect of these various statutes was discussed, and it was shown that whereas in the quinquennium 1838-42 the small-pox mortality of England was 57·2 per 100,000 living, it steadily fell to 14·4 during the period 1865-69, an achievement without parallel in the history of sanitary medicine. But then came the sudden rise during the period 1870-74 to a rate of 42·7. Discussing the various causes of this fatal epidemic, Dr. Thorne Thorne alluded to the immunity to attack from infection which is believed to be inherited by the offspring of those who have themselves suffered from certain infectious fevers, and he thought it possible that, just as the Fiji islanders were decimated by measles, against which

they had acquired no sort of protection by heredity, so the people of this country lacked, in the face of a poison of exceptional virulence, and by reason of their ancestry being vaccinated, that partial protection against small-pox which they might otherwise have inherited. But it was, above all, proved by the researches of Dr. Buchanan that the epidemic had been brought about by excessive trust in vaccination as such, without regard to the quality of the protection given, and it was abundantly proved that the potency of a comparatively recent vaccination can hardly be exaggerated. With improved practice in vaccination methods, the small-pox death-rate has again continuously decreased, until in the five years 1880-84 it stood at 6·5 per 100,000, a far smaller rate than any attained since records of this fatal disease were commenced. In dealing with typhus fever, its wide diffusions in our large towns and cities during the earlier portion of Her Majesty's reign were recalled, and it was explained how this disease had always been associated with the crowding together of houses on area and of people in dwellings; these conditions being invariably associated with a state of destitution, and leading to that fouling of air breathed which results from the concentration of the emanations from human bodies. Turning to the early history of the city of London, it was pointed out how in such places typhus was found to be a habitual pestilence, our fever wards being filled from their midst. Gradually the fact was recognised that the great enemy to typhus was free movement of air, and then came the wholesale destruction of unhealthy property, the carrying of great thoroughfares through the densest aggregations of houses, and the opening up of breathing-spaces—a task to which the Metropolitan Board of Works have already devoted over fourteen millions sterling. Some millions have also been spent by official and unofficial bodies in erecting wholesome homes for artisans and labourers. Until 1869 typhus was not separated from the deaths due to the continued fevers generally, but before that date a substantial reduction of deaths from fever had already been effected, and whereas in that year the typhus death-rate for England was 1·9 per 10,000, it had now fallen to 0·1. The story of Liverpool typhus was next discussed, but, with all its progress, that city had never got rid of its houses densely built together, back-to-back and overcrowded, and Liverpool still formed the principal centre for typhus in England. Coming next to typhoid fever, special prominence was given to the great results which followed on the final differentiation of this disease from typhus by Sir William Jenner. Then for the first time, works, hitherto carried out largely with a view to prevention of nuisance and generally in the interests of health, could be adopted intelligently and with the intention of coping with a specific infection. And, later on, the operation of the infection was traced to channels always operating through the agency of filth, but which so far had remained undetected. First came Dr. Ballard's discovery of the communication of typhoid through the agency of a milk supply; frozen creams and ices were found to act as vehicles of the infection; intermittent water-services led to its distribution; and the potency of the infection was found to be such that, even when present in potable water in quantities that were infinitesimal and altogether beyond the reach of discovery by chemistry or physics, it could, as in the Caterham epidemic, lead to widespread disaster. Steadily, with an expenditure based on the lines indicated by these discoveries, have the deaths from typhoid fever diminished, and between 1869 and the present date the rate per 10,000 has fallen from 3·9 to 1·7. In a similar way the progress of our knowledge in the prevention of scarlet fever, diphtheria, phthisis, and cholera was considered, and especial prominence was given to Mr. Power's recent researches as to the connexion which existed between scarlet fever in man and a corresponding disease in milch cows. In scarlet fever a definite micro-organism common to man and the cow had already been discovered; and diphtheria was known to have certain relations to an allied animal disease, and there were observers who believed that phthisis in man had concern with the use as food of the flesh and milk of tuberculous animals of the bovine tribe. The story of the past fifty years was one in which the principles of preventive medicine had been applied to the unravelling of the actual sources of disease, and in the case of many communicable affections their cause had been traced to organisms, definite in character, always breeding true, and having known habitats. The results were shown by the significant lessening of the general mortality, and of both death and sickness from the more preventable diseases—results which necessarily involved an improved vitality and a greater power for remunerative work among the living. The work of disease prevention during the Victorian era had proceeded on a scale that it would be difficult to define, but it can be in part measured by the influence it has had in sweeping away much of that misery which is the harder to bear because its cause is preventable, in elevating the condition of our fellow men, and in bringing health with its attendant happiness and prosperity to an untold number of British homes.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on the 11th inst. There was a large attendance of members, under the presidency of Dr. Needham.

Dr. SAVAGE read notes on the International Congress in Washington; and Drs. BLANDFORD and MICKLE also reported their observations after attending the Congress, the Medico-Psychological Section of which seemed generally admitted to have been very successful.

Dr. R. PERCY SMITH exhibited the brain of a young case of Pachymeningitis.

Several new members were elected; and a further donation of £340 for scientific purposes was reported to have been made by members of the family of the late Mr. Gaskell.

Dr. WHITE read a paper on Athetosis connected with Insanity, communicated by Dr. Greenlees.

New Inventions.

NEW UTERINE DILATOR FOR RAPID EXPANSION OF CERVICAL CANAL.

THIS instrument will, I believe, be found to supply a want long recognised by gynæcologists—namely, that of a reliable and effective means of securing the rapid and permanent dilatation of the cervical canal in the treatment of stenosis giving rise to dysmenorrhœa, sterility, &c. The principle on which it is constructed differs from that of other dilators in producing expansion of the canal from within outwards—in other words, in imitating the natural process of expansion from the uterine cavity downwards to the os uteri; whereas

other dilators, such as Hegar's &c., act in the opposite direction. In my own hands the utility of this instrument has been fully tested in a large number of cases of sterility and dysmenorrhœa in my hospital and private practice, and the method of its employment in such cases is fully described in a paper "On the Treatment of some forms of Sterility," which I recently read at the Dublin meeting of the British Medical Association. I may add that the instrument may also be used with advantage for the dilatation of the female urethra in many cases in which this procedure is indicated. This instrument has been most carefully made and artistically finished by Messrs. Arnold and Sons, West Smithfield, London.

THOS. MORE MADDEN, M.D., F.R.C.S. Edin.,
Obstet. Phys. and Gynæcologist, Mater Misericordiæ Hospital, Dublin, &c.

VACCINATION GRANTS.—Mr. Felix Jones, M.R.C.S., of Llanfyllin, Montgomeryshire, has received for the second time the Government grant for efficient vaccination.—Mr. W. D. Jefferson, of No. 1 District, Ripon Union, has obtained the grant (third time) for vaccination in the above union.

ROYAL COLLEGE OF SURGEONS' SUPPLEMENTAL CHARTER.

DEPUTATIONS FROM FELLOWS AND MEMBERS TO THE LORD PRESIDENT OF THE PRIVY COUNCIL.

[AN abstract of the following report appeared in our Second Edition of last week's issue, published at 6 P.M. on Friday.]

DEPUTATION OF FELLOWS.

ON Friday, the 11th instant, the Lord President of the Privy Council received a deputation from the Association of Fellows of the Royal College of Surgeons, consisting of Mr. Pollock, Mr. Swain, Mr. Timothy Holmes, Mr. J. Couper, Mr. Bruce Clarke, Mr. A. Norton, Mr. A. Willett, Mr. Macnamara, Surgeon-Major Smith, Mr. Alban Doran, Mr. Wickham Barnes, Mr. Wakley, and others.

Mr. POLLOCK, in introducing the deputation, said he did not know whether his lordship was familiar with the Charter granted to the College of Surgeons in 1843; if not, he would shortly call attention to the alterations made by that Charter. Prior to 1843 the Council of the College was self-elected, and the College consisted merely of Members. The Council consisted of twenty-one members, and they conducted all examinations. In 1843 a new Charter was applied for, and some very important alterations took place. The Charter provided that the Council should consist of twenty-four members to be elected by a body that was then established termed Fellows, in addition to the Members. That body of Fellows was in the first instance established by the nomination of a certain number of names without any examination or without any fee. The total number nominated was about 300; the names were submitted to the proper authorities, and the Fellowship was accordingly conferred. The body of Fellows had one privilege granted to them—namely, that for the future they should elect the Council. The Council was no longer to be self-elected, and the members remained in office until resignation or death; but whenever a vacancy occurred the Council was recruited by Fellows at a general election. After the 300 Members were nominated there was a second list of about 150 or 200 added to the original number without examination or fee, but on nomination of the Council. Subsequently to that period every Member of the College who was not included in this list of Fellows was compelled to pass an examination and to pay a certain fee. He was himself one of those unfortunate individuals. He had only been a Member of the College a few years, and on his return from a foreign journey he found himself in the predicament of being compelled to set to work to pass an examination and pay a fee in order to take the position of surgeon at St. George's Hospital. It was considered by many of them a great injustice that a large body of Members, some 15,000 in number, should be placed in an inferior position, while a certain number, by selection as it were, should be placed in a superior position. That consideration had more or less influenced him in never attempting to enter the Council of the College, because he thought that a great injustice had been done, and he had resisted all solicitations to enter the Council, although he had held the position of surgeon at St. George's Hospital for many years. The Council was elected by the Fellows, and had the management of everything connected with the College, all its general arrangements, its examinations, and its finances. They called a meeting of the Fellows once a year, at which they made a statement of the general work of the College, but the Fellows had no power or authority to interfere in any way, to alter anything, or to express any opinion with regard to the conduct of the College during that time; in fact, they had no share in the management of the corporation. He was happy to say that there were present in the deputation several distinguished members of the profession. Mr. Holmes, senior surgeon of St. George's Hospital, was present as a past examiner and a past member of the Council, and had he retained his seat in the Council (and they would all have been glad if he had done so), he would probably by this time have been President of the College. There were also present two members of the Council, Mr. Macnamara and Mr. Willett, and he had a letter from a past member and another from a present member of the Council, who entirely approved of their proceedings. A few years ago a new Charter was contemplated by the College, and in consequence of that Mr. Swain of Plymouth proposed a certain number of resolutions at an annual meeting of the College. As that gentleman was the proposer of those resolutions, he thought it would be better for them to be represented by him on the present occasion, and he would therefore call upon Mr. Swain to take up the subject.

Mr. SWAIN said that as one of the originators of the movement, which, as his lordship was aware, was to increase the power and the rights of the Fellows and Members of the College, it fell to his lot to address his lordship, and he would do so very briefly upon one topic only. It had fallen to his lot in March, 1884, to move the following resolution, which would indicate the spirit by which the Fellows and Members were moved: "That it is desirable that no alteration in the condition or relations of the College shall be effected without the consent of the Fellows and Members convened to discuss such alteration. That there shall be an annual meeting of Fellows and Members at which the annual report shall be presented, received, and adopted." That resolution on that occasion, and he believed on two other occasions, or at any rate one exactly similar, was carried unanimously. At those meetings the President and Council of the College had sat quietly by, having made no motion in any shape or form, and they simply rejected all overtures which were made to them in the direction of the resolution. The position in which the Fellows and Members were placed had already been stated. They were annually called by the College to meet from all parts of the metropolis, and from all parts of the United Kingdom. The report was laid before them, but it was nothing more or less than the minutes of the meeting of the Council. The Members were allowed the right of speech and the right of meeting, but they had no power to modify the report in any way or to shape the action of the Council. It appeared to him and to all concerned, and he ventured to think it would also appear to his lordship, that to call together a number of men from all parts of the kingdom who were certainly not the least educated portion of the community, and to ask them to come and hear a report read about which they knew everything already, and to give them no power whatever to adopt the report, to reject it, or to modify it in any way, was, to say the least, exceedingly puerile. What they especially asked for was that, as Fellows and Members of the College, they might have some power in the management of the College. Year by year the College was becoming more and more important, not only as an educating body, but also as a spending body. They had a very large sum of money at their command, and although the Members had perfect confidence in the twenty-four gentlemen who constituted the Council, it was not in the nature of things that a power of that sort should be vested in the hands of twenty-four gentlemen who were entirely irresponsible to anybody, either for the management of the College or for the expenditure of the very large sums of money entrusted to them. It was not at all in accordance with the spirit of the times, and the deputation sincerely hoped that in any consideration of the new Charter some greater powers would be conferred upon the Fellows and Members in the management of their own College. He thought he was right in saying that had the Council met them upon a single point with anything like liberality or with any desire to concede the point to them, the agitation would not have proceeded to the extent to which it had gone—an extent far beyond the limits which they had originally contemplated.

Mr. TIMOTHY HOLMES said he had been asked to say a few words as the mover of the resolution which he had the honour of forwarding to the Lord President at the general meeting of the College of Surgeons held a few days ago, and also as having served the College in a great variety of capacities—he might say in every possible capacity except that of president; and, if he might say so much about himself, it was in consequence of his disapproval of the way in which the election of president was managed that he ceased to be a member of the Council. He was happy to think that the movement in which they were concerned was largely supported even by the members of the Council of the College themselves, two of whom were present with the deputation in order to support the general objects for which the Association was founded. Those general objects had been ex-

plained by Mr. Swain. The original resolutions on which the Association was founded were four in number. The first was, "That in the opinion of this meeting it would materially conduce to the welfare of the College that the Fellows and Members should be invested with a larger share of its management." The second resolution was, "That it is desirable that no alteration in the constitution or relations of the College should be effected without the consent of the Fellows and Members convened to discuss such alteration." The third was, "That there should be an annual meeting of Fellows and Members, at which the annual report should be presented, received, and adopted." And the fourth was, "That at such meeting the president for the ensuing year should be elected by a majority of the Fellows present." It was on those lines that the Association of Fellows was formed, and it comprised about one-fourth of the whole number of Fellows of the College, a very large number when they considered that men in practice were very little disposed to join in any such questions as these, which really did not very much bear upon the immediate needs of professional life. He submitted, as a proposition that must commend itself to the common sense of everyone, that it was an anomaly that a great institution, consisting of at the very least 13,000 perfectly educated and well-cultivated men, should be entirely at the mercy of twenty-four of their number. It was a thing which was never contemplated by the original Charters. It was perfectly evident in the original Charters, to which that of 1843 was only a supplement, that Members were intended to take an active share in the management of the College, and were, in fact, the governing body of the College. That, however, had been entirely set aside, and since the Charter of 1843 the Members had had nothing whatever to do with the management. They were treated as having exactly the same rights or no rights as persons actually strangers to the College; and the Fellows themselves, who were created by that Charter, had no power whatsoever, except that of coming to the College once a year and voting for the members of the Council—beyond, of course, admission to the College, and to the examinations and other functions which took place therein, and which naturally they could not be deprived of. That was an anomaly, even comparing it with a body so strict in its management as the neighbouring College of Physicians, for there the Fellows of the College had that control over the proceedings of the Council which was the natural privilege and almost the right of Fellows of a College. He could not understand for what reason the Council of the College should be invested with an absolute and arbitrary discretion over the great property which had been accumulated, partly by the contributions of Fellows and Members, and partly by the bequest of a gentleman, whom his lordship might have known, and who had recently left the College a very large sum of money. He did not see why all this influence, all this power, and this great institution should be entirely in the hands of a Council with no control whatever on the part of any other person, so long as they confined themselves to professional objects. They were all willing to treat the Council with that respect which was their due, and they were not there to charge them with anything like corruption or malversation, or anything of the kind, but he repeated that they disposed of this money and of their great influence in a way which deprived Fellows and Members of what, he submitted, they ought to have—namely, some right of management in their own College. The Council of the College proposed in their petition for a new Charter to do certain things. In the first place, in respect to the Fellowship, in direct defiance to the wishes of the Fellows as they had been formulated on many occasions, and not only of the Fellows, but of the Members also, they proposed to empower the Council to elect to the Fellowship Members of twenty years' standing, not exceeding ten, instead of two, in each year. That was really a proposal to revive the old order of Fellows by election, which Mr. Pollock had referred to, and to perpetuate an abuse which had been protested against by all the Fellows by examination from the time that it existed. There was a reason for its existence originally. At that time the order of Fellows was new, and it was thought right that any Member who was a Member in the year 1843 should have admission into the new order. Whether that was right or not he did not say, but there was no reason for it at the present time. The Fellowship examination was a thing which they were proud of. It was the first examination, the first qualification for surgeons anywhere. They protested most strongly, and would continue to protest in every legitimate way, against anything which would discredit this diploma. That his lordship might see how strong the feeling of the profession was on that subject, he would refer to a resolution passed at a late meeting of the Fellows and Members of the College on this very subject. That was a meeting held on Nov. 4th, 1886, and the resolution that was carried was this: "That in the opinion of this meeting the first method recommended by the Council for widening the basis upon which the Fellowship is obtained tends to lower the academic status of that diploma, and in the interests of surgical education is not advisable." That referred to a proposal which, if not identical with the present one, was the same to all practical purpose, and the resolution he had read was proposed, not by a Fellow of the College, but by a Member, seconded by another Member, and carried by acclamation by the Members present. He protested most strongly, in the name of the Association of Fellows, against that clause of the new Charter, and begged his lordship to give it his most serious attention before he proposed to recommend Her Majesty to assent to the prayer of the College. And what he said of that clause, he would say still more strongly, if possible, about the one preceding it, which was to enable the Council to determine by rules and regulations, instead of, as at present, by bye-laws, the condition of admission to Fellowship by examination. He said that that proposal ought to be entirely excised; that one of the great safeguards the profession now had against the tampering with the Fellowship, to which some members of the Council showed so strong a disposition, was that they could not do it by resolution; and, if he was not wearying his lordship, he would give a very strong example of the fact. It was not many years ago since he was a colleague of the present President of the College, Mr. Savory, and another gentleman, who he was sorry to say was now deceased (Mr. Cooper Forster), in the Court of Examiners, when it came to their knowledge, quite casually, that a proposal was being passed through the Council which they considered derogatory to the examination for the Fellowship of the College of Surgeons. A very short time was given before the next meeting of the Council, at which this bye-law would have been affirmed and passed, so far as the College could pass it, and would have been submitted to the Secretary of State, who, being probably not in possession of sufficient information, would in all probability have passed it as a matter of course. They exerted themselves to the utmost—Mr. Savory, Mr. Cooper Forster, and himself—and addressed every Fellow by examination who was at that time accessible in England. The result was, they made so strong a protest on the subject that the Council of the College at the last moment rescinded the decree, and the proposal was no more heard of. But if the proposition which was now made had then been in operation there would have been no such opportunity; the Council could have passed it at one meeting and confirmed it at the next, before the matter was laid before the public at all. He was sure that he would have the support of all the Fellows of the Association in protesting most strongly against those two clauses of the revised Charter. Mr. Swain had alluded to the way in which the Council determined and disposed of the very large funds which were now in their hands, and on that subject he would therefore say nothing further, except to protest in the strongest way against any such power being left in their hands. But there were other matters on which the feeling of the profession was even stronger. For instance, the Council of the College, joining with the College of Physicians, had established a new examining body, to which they had not the slightest objection. He was a member of the Council when the matter was carried through, and thought it was a wise and good step, and one in the interest of the profession, but at the same time a step of that kind ought not to have been taken without the profession having the opportunity of pronouncing their opinion upon it, and no professional body was so competent to pronounce an opinion upon it as the Members of the College of Surgeons themselves. The Fellows of the College of Physicians had, as he had mentioned, a privilege which the Fellows of the College of Surgeons did not possess in this matter. But besides that, the Council of the College had taken a step which was very much more questionable and arbitrary. They had excluded from that league of theirs with the College of Physicians the Society of Apothecaries, and by that exclusion they had set up in London a second examining body. Now, if there was one thing on which professional feeling

was more strong than another, it was that there should not be a plurality of examining bodies, and the College of Surgeons had done that in spite of the protest of the General Council itself. The General Council begged the College of Surgeons to reconsider their proposal, and they would not do so. That showed the absolute control which the Council of the College of Surgeons affected to have over matters that ought to be matters of common interest to the whole profession. The same thing might be said with regard to granting degrees. The College of Surgeons proposed to join the College of Physicians in making some arrangement for the granting of medical degrees, and they had never ascertained what the feeling of the present practitioners of medicine was upon the subject, and even if they had ascertained it they would not have taken the smallest notice of it. He wished to refer to the election of president, a matter which had touched his feelings very strongly, and also those of his old friend and instructor, Mr. Pollock. It used to be the habit at the Council of the College of Surgeons simply to hand this office round from one man to the next. That became such a mere matter of routine that it degraded the office of president, and, in fact, very few people knew who the president of the College of Surgeons was. That matter was one which required not so much the intervention of any public authority as a full and free discussion between the Council of the College and their constituents. They did not ask his lordship to interfere in a professional matter, which must necessarily be somewhat obscure to him; but they asked him to remit those matters back for consideration in order that there might take place—what had never yet taken place in the history of the College of Surgeons—a full discussion between the governing body and the body that it governed, in order that they might state plainly their proposals and the reasons for their proposals, and that they might hear any objections that might be raised to them. They were not certainly destitute of experience or information on those matters; they were not violent agitators or revolutionaries; they were perfectly prepared to meet together and to settle those matters in a friendly way with friends such as they regarded the Council of the College to be. They thought, however, that to attempt to settle this off-hand by the mere motion of a majority of a couple of dozen men with whom they were never able to have any intelligent discussion was an absurdity, and they confidently hoped that Her Majesty would be advised to remit this proposed new Charter for reconsideration and for discussion. There was only one other matter on which he wished to speak, and that was with respect to the claims of the Members. They were all Members of the College as well as Fellows, and their Association, as an Association, backed up the claims of the Members to a fair and reasonable share in the management of the College. He perfectly allowed that Fellows by examination ought to have the leading share in a body which was to a very great extent educational, but they said as that body ought not to be entirely educational, so the Members ought to have a fair share in its management. As an Association they had backed up the claims of the Members, but there were some of them who did not take that view. Those of the Fellows who did take that view would join the deputation of Members, and it was partly for that reason that they had asked that they might be received separately.

Mr. TWEEDY said he did not know that he could add much to the statements just made, but he would call his lordship's attention to the difference between the practice of the College of Surgeons of England and that of other Colleges. In the King and Queen's College of Physicians of Ireland there were meetings of the Fellows every month. In the Royal College of Physicians of Edinburgh there were four quarterly meetings of Fellows, and extraordinary meetings of Fellows on the requisition of four Fellows. At the Faculty of Physicians and Surgeons of Glasgow there were ordinary meetings of Fellows resident in Scotland every month. At the Royal College of Physicians of London there were four ordinary meetings, and extraordinary meetings on requisition. At the Royal College of Surgeons of Edinburgh there were regular general meetings, and at the Royal College of Surgeons in Ireland, though the Fellows were not consulted by the Council, yet the Council was elected annually; so that really the Fellows had an effective power in the control of the management of the College. In the case of the Fellows of the College of Surgeons of England, Mr. Holmes and Mr. Swain would pardon him if he said he thought they had made their position rather more favourable than it was. They had absolutely no inherent right of meeting in the College whatever. (Hear, hear.) They had had two or three general meetings since the Association was formed, and in consequence of the representations made by it, but previously no Fellow and no Member, and no body of Fellows or Members, had, as such, any right whatever to hold a meeting or to call a meeting in the College. There was a bye-law framed in the year 1831 for the purpose of preventing such meetings in the College. The Members of the College in that year met at the Hunterian Oration, and some of them thought it a convenient occasion to protest against an order that had been given for the exclusion of navy surgeons from levées. The Council at that time endeavoured to, and did as far as it could effectually, suppress the meeting. A good deal of contention arose; but the consequence was that in May of that year the Council obtained a bye-law, which was still in existence, preventing all meetings in the College, except with the consent and approval of the president and the Council. That bye-law had, ever since, effectually prevented Fellows and Members from holding a meeting in the College, and yet, curiously enough, it was by that bye-law that they were now allowed to meet in the College. In the year 1869 Mr. Erichsen moved in the Council that Fellows and Members should have greater facilities for meeting in the College to discuss collegiate affairs. When the report was made, it was found that this bye-law, which had been framed to exclude Members and Fellows from such meetings, was sufficiently elastic to allow them to meet. The bye-law stated that no business should be transacted or any matter discussed or debated at any meeting or assemblage convened by or under the authority of the president or Council, except the special business for which the meeting was convened. The meetings that had been convened had been meetings for the election of members of Council, for the delivery of lectures, and so on, but at those meetings effectual precautions had been taken to prevent the discussion, or even the mention, of any other subject whatever relating to the College. So that, so far from their having the right of meeting, they had no real right of meeting. In consequence of the representations of the Association of Fellows, they had been allowed lately to go to the College once a year to receive as read a report which, as a matter of fact, he believed, was printed and bound up in the College Calendar before the meeting was held. Such a proceeding was ridiculous and absurd. (Hear, hear.) One other point he wished to call attention to. A resolution had been passed by the Association, and unanimously approved by large general meetings of Fellows and Members held in the College, that no alteration should be made in the constitution or relations of the College, or in any bye-laws, without the consent of the Fellows and Members specially convened to discuss the same. In the Charters the Fellows and Members were called the body corporate and politic. But the Council, which was defined as being the governing body, had declined to accept this proposal. Before any person could be admitted as a Member of the College he had to make this declaration in the presence of an officer of the College: "I, A. B., do solemnly and sincerely declare that while a Member of the College of Surgeons of England I will observe the bye-laws thereof"; and then it was laid down that "every person prior to his admission as a Member shall subscribe his name to a copy of the bye-laws of the College in testimony of his having engaged himself to the observance thereof." They had therefore solemnly to declare to observe bye-laws which might be altered, rescinded, or added to without their consent and without their sanction—nay, even without their knowledge. They were members of the body politic and corporate, and yet the constitution of that body might be altered in many ways without their having any voice or control in the matter. It seemed to him contrary to every principle of equity and justice that one party to a solemn contract should be at liberty to alter the terms as they pleased (hear, hear), while the other party should have no power whatever of approving or disapproving. At present, though the Fellows had very little power, they did, as a matter of fact, nominally elect the Council; but the conditions under which that election took place were so prohibitive and restrictive that the Council was, as a matter of fact, elected by a very small number of persons. He had prepared a list, from which would be seen the number of votes by which the present members of the Council were elected.

At the head stood Sir James Paget, but with only 205 votes, while at the bottom of the list stood another member of the Council, elected by 101 votes. A member of the Council might therefore be elected by about 100 votes, and yet he then became one of twenty-four, or perhaps one of thirteen, who might have the absolute disposal of the affairs of the College of Surgeons, numbering, say, from 13,000 to 17,000 Members. In the College Calendar the number of Fellows for the year was given at about 1100, and the number of Members at 17,000. These numbers, he believed, were not strictly accurate. It was, perhaps, impossible to keep a strict Register, but, as a matter of fact, the Fellows, he believed, numbered about 1000, and the Members from 14,000 to 15,000; but 101 votes, as it seemed, might make a Fellow of the College a member of the Council; by this it would be seen how little representative the Council was of the great body of the profession.

The LORD PRESIDENT, in reply, said that what had been brought before him should receive his careful attention. As he understood it, their case practically came to this—that they wanted an alteration of the constitution of the Royal College of Surgeons, to make it a popular body to a certain extent, instead of being comparatively a close body. (Hear, hear.) That was the foundation of what they required, and he would look to the facts they had laid before him before coming to any decision.

Mr. TIMOTHY HOLMES asked the Lord President whether he would like this matter to be put in writing.

The LORD PRESIDENT said he certainly should like it to be in writing.

Mr. POLLOCK said he was sure he expressed the feelings of the meeting in thanking his lordship sincerely for the kindness with which he had received them.

DEPUTATION OF MEMBERS.

A very numerously attended deputation from the Association of Members of the Royal College of Surgeons then waited upon the Lord President with reference to the same subject.

Sir GUYER HUNTER, M.P., in introducing the deputation, said he did not intend to enter into any details, but would leave those to others who were more competent to speak upon them. He was in entire sympathy with this meeting; it had his hearty concurrence and best wishes. It did seem an exceedingly anomalous state of affairs that when the electoral franchise had been extended even to the illiterate classes of the country, a body of diplomatised Members of a College should not be allowed to exercise any influence in the affairs of the College from which they had their diplomas. In 1797 he was informed the Houses of Parliament threw out a Bill which failed to recognise the status and the position of the Members of the College with reference to the capacity to elect the president and to sit on the Council; and Lord Thurlow, in speaking of the Members, then said: "They have great cause to complain: their privileges have been violated; they have been too long trampled under foot, and they have the strongest title in the world to have their complaints heard with patience and attention." He was sure that the Lord President would give his patient attention to what would be laid before him, and hoped that it would end in the settlement of a question of great difficulty, and which had created a great deal of dissatisfaction amongst the members of the medical profession. (Hear, hear.)

Mr. HART read a long statement endeavouring to trace the succession of the College of Surgeons from the two guilds, the Company of Barber Surgeons and the Fellowship of Surgeons, existing in the early part of the fourteenth century. He referred to the various changes which had been made in the Charters of the College. After the Charter of 1843, he said that, with the exception of an unimportant Supplementary Charter in 1849, relating to the examination in dental surgery, no further legal change in the rights or constitution of the commonalty had been made down to the present time. An important practical change, however, had taken place as to the customary annual meetings of all the Members. These did not appear to have been held in the bad times following 1784, although the body of Members successfully asserted their right to meet and act in connexion with the petition against the Bill of 1796-7; but with the exception of an important meeting at which they resolved to approach the Crown for an amendment of the Charter in 1826, they did not appear to have taken any prominent action until the present movement began in consequence of an agitation that had been growing for many years. The President and the Council had for a few years past been in the habit of convening an annual meeting of Members and Fellows, and had placed before them a printed report comprising a record of their transactions during the Collegiate year, and a statement of receipts and expenditure. In the Minutes of the Council the report was officially described as being "submitted" to the meeting. The printed statement included the Council Minutes and other matters of business, and the balance-sheet of income and expenditure for the year. The Council professed to take up the position that they were not concerned in the proceedings of the meeting, and they had generally attended in a separate part of the theatre. They commonly refrained from taking any part in the discussion, but they had not, in fact, insisted upon that view, inasmuch as the president had uniformly taken the chair as of right in his capacity of chairman of the whole community, and the secretary of the College had kept the Minutes as a part of his general duty; and it also happened that a member of the Council had risen to a point of order, while another member spoke and voted in favour of a resolution proposed in the interests of the Members of the College. In addition to that, the Council had received, discussed, and entered upon its Minutes such resolutions as they were directed to do by the general meeting, and had appointed certain of its members as a committee to discuss with the representatives of the Members' Association its policy as to the resolutions passed. With regard to the proposals which had been placed before his lordship for a Charter, the Council, at a meeting on May 5th, 1887, expressly based its refusal to convene a special meeting of the Fellows and Members to discuss the proposed Draft Charter upon the ground that the subjects to which it referred had been already submitted to the Fellows and Members. In view of all those circumstances, it was submitted that the annual meeting recently held was, in fact, a revival of the customary annual mote at which the whole body of Members had always been, and still were, entitled to consider the affairs of their community, and pass resolutions relating to their common interest. The petition on which the present deputation appeared embodied the resolutions passed at the last of those general meetings held on the 3rd inst. The subjects discussed had been under consideration at several previous annual meetings, and gave ample evidence of the steadily growing desire of the Members to obtain recognition of their legal and moral claim to some representation on the governing body. Resolutions tending in a similar direction had been submitted at a former meeting in November, 1886, and were rejected by the Council on Jan. 13th last. With regard to the form in which the present application came before the Privy Council, the deputation desired to say that all the resolutions embodied in the present Members' petition had been duly declared by the Chairman to be carried at the annual meeting, and that a consequential motion was then made and seconded in the usual way that the resolutions be forwarded through the Chairman to the Privy Council. Those were resolutions identical with the provisions of the Charter. That motion the Chairman ruled out of order, and held that the question of forwarding the Members' resolution to the Crown must be left to the decision of the members of the Council. Against that arbitrary action, which affected to abrogate a right permitted even in the dark days of 1797 and 1826, the present deputation on behalf of the Members desired formally to protest. (Hear, hear.) They tendered their present petition to the Crown as being a lawful and constitutional declaration of the Members of the ancient Society of Surgeons in general meeting assembled, and they respectfully prayed the consideration of the Crown to their contention that, especially in such a matter as an application to the Crown for any alteration of the existing Charter, the decision of the whole body of free men ought to prevail against an adverse resolution on the part of the executive. At an earlier general meeting of Members in March, 1884, it was resolved that no alteration in the constitution of the College should be effected without the consent of the Members, and also that there should be an annual meeting. Both those proposals appeared at that time to have received the assent of the Council, and it was submitted therefore that in that respect they had recognised the right of the Members to approve or otherwise the proposals for the alteration of the Charters, and that they ought not

now to be permitted to override the constitutional expression of opinion invited on their own action. The Council claimed the right to have submitted to them beforehand any resolutions which were to be submitted to the Members, and to disallow them at pleasure. This claim was not admitted by the Members, and they submitted that it was bad in law. Such cases as had from time to time arisen had been amicably arranged, excepting only on the occasion of the disallowance of a motion to forward resolutions to the Privy Council. The Members submitted that as the President and Council did not exercise the right claimed to forbid the discussion of these proposals, they further admitted the right of the Members to have a voice in the present question. In 1885 the Association of Fellows insisted that no steps should be taken by the Council to obtain a new Charter till the various alterations proposed were accepted by the Council and submitted to the General meeting of Fellows and Members, and that proposal was endorsed by a minority of the Council. He wished to call attention to the fact that the Council in the course of the present year directed voting papers to be issued to all the Fellows, inquiring whether, in their opinion, Members should be allowed to vote in elections for the Council, or whether Members should be eligible for election. The Members objected to the form in which these questions were put. (Hear, hear.) They considered the result, nevertheless, largely in confirmation of the views they now presented. Out of 1116 appearing in the College Calendar only 419 voted. Those were all Fellows who were asked whether their own privileges should be curtailed by the admission of Members, and when it was remembered that the proposal itself to some extent curtailed the privileges of the Fellows, it was submitted that the result was a moral victory. Two hundred and seventy-six answered the official circular in favour of the Members' claim, six sent undecided answers, and 260 returned no reply. About 130 did not appear to have received the circular. About the same time the Association of Members made a private attempt to ascertain the opinion of all the Members of the College, and for this purpose they issued a circular. Taking 10,000 Members as being accessible in this way, of those 10,000 nearly 5000 had signed the petition which had been already placed before the Privy Council in favour of the contention now advanced. That was a clear half, and that was more remarkable because circumstances had proved that the medical profession were slow to return any circulars of that sort. When 20,000 circulars were sent out with regard to the right of voting for the election of members of the General Medical Council, only 5000 were returned; so that if in the present instance 5000 had been returned out of 10,000, that showed a general consensus of opinion, which was very remarkable. With regard to the question of public policy, he would only refer to the objections that had been raised on the part of the Council to the claim of the Members. The first was that the Members never had any right to vote for the governing body; secondly, that the functions of the College were educational and scientific only; thirdly, that in any case the Members were not qualified to take part in elections, and that the extending of the constituency would lead to bad results; fourthly, that analogous bodies did not give to ordinary Members power of voting; fifthly, that any concession of voting power to the Members would be a confiscation of the inherent rights of the present Fellows. Taking the first point, that the Members never had any right, it had been abundantly shown that the election rights of Members were not only undisputed, but were the essential points in the constitution of the Society; and the right of Members to assemble in general meeting for proper purposes had, in truth, never ceased to exist, and was exercised with practical continuity down to the periods of anarchy at the end of the last century, when the Crown overrode the decision of Parliament, and with what was legally known as "fraud" granted the present autocratic Charter. As to the second point, it was notorious that the Members entirely protested against it as a falsification of the real nature of the duties of the College. It was admitted that the business of the College as defined in Section 15 and in the bye-laws was to protect and defend the Members; but it was only quite lately, in the course of the last year or two, and under the strongest pressure, that the Council had shown the least interest or sympathy in defending the Members, and they had done this only in a very small number of cases. Great dissatisfaction existed amongst Members as to the employment of the Wilson bequest—a matter in which they considered they ought to have a voice. The third objection was only an old argument repeatedly brought before select committees and always rejected. Precisely the same argument had been used against the extension of the franchise. With regard to the fourth objection, that there was no analogy in the case of other universities, his lordship was well acquainted with the constitution of the University of London, where the junior graduates had full voting powers and were eligible to be elected on the Senate. In the case of the older universities, it was well known that although it was true the M.A.'s only voted, yet the obtaining of that degree was merely a question of time and the payment of a small fee. The Members were quite willing to submit the limits with regard to age and also as to the number of Members that might be elected on the Council. The next argument of the Council was that there was no case of representation and taxation as alleged, but that the Members paid a fee for their diploma and obtained it, and had no further claim in respect of the money so paid. That argument had been declared by select committees and by Parliament to be out of the question. It was evident that if the payment of a fee gave the Members no right to share in the administration, it was impossible to say why Fellows should have any claims, the rights being the same in the one case as in the other. It should not be forgotten that the Members contributed £16,000 to the funds of the College, and the Fellows only £1000. The exclusion of Members, it was contended, must prejudicially affect the public interest. It was a remarkable fact that in a College numbering from 12,000 to 17,000 Members, including men largely engaged in the Army and Navy and in the Poor-law and Sanitary Services, not one of those services was represented on the Council, or had been for fifty years. The Council of the College, consisting almost exclusively of consulting surgeons, had been, and was still, greatly to its own detriment and greatly to the detriment of the public, altogether out of touch with the great public interests of medicine which had from time to time come before Parliament. The public and the College had suffered greatly from the limitation of its constitution, and by introducing such a representation as was now asked, not only would justice be done to the Members, but the public interest would be very largely advanced.

MR. TIMOTHY HOLMES said that he represented a very large number of the Fellows of the College who were most earnestly anxious to see the state of things which had been so well described terminated, so that the College of Surgeons should be representative, not only of the consulting Surgeons of London, but also of the whole medical profession engaged in the practice of surgery. (Hear, hear.) He hoped that by the decision of his lordship this end might be secured.

The LORD PRESIDENT said he had, of course, very little to answer upon the present occasion, because it was a matter which he must very carefully discuss, and upon which he must gain as much information as possible upon the various points that had been raised. He was not quite sure that Mr. Hart's view of going back to the ancient guilds would be so very satisfactory to the Members of the body whom he represented as he supposed, because, though he might think upon one point they went with him, upon others they would probably be in a somewhat different category. But, however that might be, he could only say he would give the statements that had been laid before him his most serious and careful attention.

Mr. HART inquired if the Lord President would hear counsel in the event of any legal explanation being required.

The LORD PRESIDENT said that if the Members thought that the Charter was in excess of the powers of the Crown they could raise that point in the ordinary courts of law. No materials were before him for deciding that point. The question before him was the granting of a Supplemental Charter to a Charter which must be taken to be a valid one. If any difficult point arose, he should take care to seek information upon it.

Sir GUYER HUNTER thanked his lordship, and the deputation withdrew.

ASYLUM FOR INCURABLES.—A wealthy Russian lady, named Khvoshtinski, has left £10,000 to found an asylum for incurables in the town of Tamboff.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 19, 1887.

WHATEVER may be the official decision at which the Lord President of the Council may arrive, the reception which he gave on the 11th inst. to a deputation of the Fellows and of the Members of the Royal College of Surgeons of England respectively is not only an immediate gain to the cause of collegiate reform, but marks an epoch in the history of the College. In a second edition of our last week's issue, we published a short account of these deputations, and a fuller report appears in the present number. These reports tell a woful but instructive tale, which may be briefly summed up in the words with which the Lord President dismissed the deputation of Fellows: "It practically comes to this: you want an alteration in the constitution of the Royal College of Surgeons to make it a popular body to a certain extent, instead of being comparatively a close body." This is, in truth, the precise object of an agitation which has persisted more or less, though with dormant intervals, since the first conception of the College in the year 1797—three years before its birth—down to the present time. The principal eruptions of the agitation occurred in the years 1826, 1843, 1848, and 1870. The present outbreak began about five years ago, when an Association of Fellows of that day petitioned the Council to obtain an alteration in the Charter which required compulsory personal voting at the election of members of the Council. At length a committee of the Council was appointed to consider and report on this suggestion and any other alterations that might be desirable in the Charters. At a meeting of the Council held in January, 1884, a list of alterations proposed by the Council to be made in the Charters was presented, and an attempt was made to pass them through the Council and into the office of the Privy Council without the knowledge of the Fellows and Members of the College. Happily this attempt was frustrated, and the proposed alterations were "reported" to a general meeting of Fellows and Members held on March 24th, 1884. At that meeting, at which the proposed alterations had been approved, certain other suggestions were made. These were, chiefly, that Fellows and Members should be invested with a larger share in the management of the College; that there should be an annual meeting of Fellows and Members for the reception and discussion of the report of the Council; and that no alteration should be effected in the constitution or in the relations of the College without the consent of the Fellows and Members convened to discuss such alteration. These demands the Council from the first was unwilling to entertain, and, with the exception of one small concession, has ever since resisted and refused. The immediate effect of this refusal was the creation of two powerful organisations of Fellows and of Members, pledged to uphold the resolutions passed at the general meeting, and to promote in every lawful manner a readjustment of the relations between the Council and the general body of the College. These organisations, known as the Association of Fellows and the Association of Members, soon numbered in the aggregate many thousands of the body politic and corporate. The Association of Fellows confined itself to the principles underlying the proposals made at the general meeting, but the Association of Members, took a bolder flight, and at one swoop attempted to secure an extension of the franchise to all Members, and the conferring on Members rights coequal and coextensive with those of Fellows. It seemed at one time as if the aims and intentions of the two Associations would prove antagonistic and mutually destructive; but by prudent and timely concessions and compromises an *entente cordiale* was established, and for more than two years these organisations have loyally co-operated, each in its own way working for the attainment of the same end.

Both the Associations find a common object in the following approved opinion: First, that it would tend to promote the interests of medical polity and education if Members of the College of ten years' standing were empowered to vote at the election of members of the Council, and if Members of twenty years' standing were eligible to sit in the Council; and, secondly, that no alteration should be made in the constitution or in the relations of the College, or in any of its bye-laws, without the consent of Fellows and Members convened to discuss such alteration. These two propositions have been more than once adopted by large general meetings of Fellows and Members; and at the general meeting held on the 4th inst. a resolution was unanimously passed disapproving of the application for a new Charter which did not contain these provisions. The Council has, however, refused to alter its first decision, and the appeal has now been transferred to the tribunal of the Privy Council. What may be the immediate result of that appeal it would not be right or proper to attempt to forecast. The Lord President has promised to give the matter his best attention, and we must await his decision. What the next stage will be must therefore depend upon that decision; but be this decision what it may, it is certain that henceforth the limits of the controversy will never again be confined to the same narrow area as before. Now that public attention has been called to the defects of the fundamental constitution of the College, it is almost impossible to conceive that the *status quo antea* can much longer be maintained.

CARDIAC auscultation presents ample scope for the scientific exercise of the imagination. The problems that it offers are not to be solved by an appeal to direct experiment; they can only be tested in the light of facts concerning the physiology and physics of the heart and its contents applied to the abnormal conditions of disease, and no position taken up with respect to the mechanism of heart murmurs can be justified, except by appeal to such knowledge. We have been forcibly reminded of this in noting the revival of the controversy around the much-disputed question of the causation of the presystolic murmur, which has been carried on in our columns during the past few weeks, and which culminated in the debate at the Medical Society on the 7th. The same controversy, in which some of the present disputants engaged, raged round the contention of Dr. BARCLAY fifteen years

ago. Dr. DICKINSON, in reviving Dr. BARCLAY'S views, has urged them with his characteristic felicity of language and directness of aim. He speaks with confidence of the time when they will become accepted as canons, and is not dismayed at the number and authority of his opponents. It is not the diagnostic value of the bruit that is in question. All admit that it is the typical indication of a stenosed or obstructed mitral orifice; but how and when it is produced—these are the points which have been so strenuously contested, and they are just the points which are so little capable of proof. That wherever the presystolic murmur is noted clinically the existence of mitral thickening or narrowing may be predicated is abundantly proved from post-mortem evidence; but no such evidence can inform us, except only indirectly and inferentially, that the bruit we heard during life was due to the blood flowing in the one direction rather than the other. And, indeed, whilst freely admitting the value of having true conceptions on the mode of production of cardiac bruits, it must be confessed that the all-important fact is the lesion they indicate, and not the precise mode in which they are generated. In this respect the presystolic murmur is pathognomonic.

It may be well—although this is by no means the first time that the subject has been discussed by us[1]—to briefly summarise the arguments that have been raised on the two sides of the question—viz., whether the murmur in question is an obstructive or a regurgitant mitral bruit; whether it be truly or falsely denominated "presystolic." The first place must be given to the attacking party. Dr. DICKINSON based his argument upon several clinical and pathological facts. He avers that, when accurately timed with the apex beat, the bruit and its accompanying thrill are synchronous with that index of the ventricular systole; also that the characteristic loudness and intensity of the murmur are more compatible with its production through the ventricular systole, gathering in force as it proceeds, than with the feeble auricular contraction; that it blends with the systolic sound, and may be continued without a break into an admittedly "systolic" bruit. Its abrupt termination in a "snap" is due to the closure of the thickened cusps after the escape of blood at the beginning of the systole, this closure being delayed by the physical change in the cusps. He would term the bruit preferably an "early systolic," and would discard such phrases as "presystolic" and "auricular-systolic" as misleading and inaccurate. The only direct obstructive murmur generated at the mitral orifice that is recognised by Dr. DICKINSON is the "diastolic mitral" of HOPE, which is comparatively rare. In the correspondence that followed in our columns, these views were supported by Dr. JOHN HARLEY, who declared that he had always regarded the bruit as regurgitant, and who denounced the alternative view as being both "unphysical and unphysiological." Dr. SEYMOUR TAYLOR explained the bruit as being produced by the vibration of the chordæ, and not as generated at the orifice; also that, owing to their altered state, the valves would close more slowly than in health, so that time would be allowed for the murmur and thrill to precede the systolic sound, and yet themselves be strictly systolic. Dr. OWEN TRAVIS showed that normally the valves are uplifted by the blood filling the ventricles, and come together before the actual contraction of the ventricle, but that when diseased they would require a greater force for their approximation, such as could only be supplied by the systole of the ventricle. Dr. CHARLEWOOD TURNER deduced an argument in favour of the regurgitant hypothesis from his observations of a case of pulmonary regurgitation with prediastolic murmur; although he seemed to admit that the presystolic bruit was both direct and regurgitant, and appealed to the cardiograph in his support. Lastly, Dr. HANDFORD argued at length upon the hypothesis that the two ventricles do not act synchronously in mitral stenosis, and that the impulse in this affection is that of the right ventricle, which is probably delayed in its contraction behind the left. All which arguments, it may be noted, have a very considerable theoretical basis.

On the other side, the challenge thrown down by Dr. DICKINSON was taken up by Professor GAIRDNER, who in times past defended his position from the onslaught of Dr. BARCLAY, and who also recently had met Dr. MCVAIL'S physical objections at the Glasgow Medico-Chirurgical Society. As the first clear exponent of the auricular-systolic view, Professor GAIRDNER could not do otherwise than lay stress on the fact that an obstructive mitral bruit may start from the second sound and cover the whole diastole and pause, so as practically to exclude any bruit produced by regurgitation before the systolic sound. The triumphant indication of the value and import of the murmur rendered by his classical and unique case of ball-valve obstruction of the tricuspid was again quoted, for it conveys a lesson which it would be futile to ignore; whilst as to the blending of presystolic and systolic bruits, he averred that this was never so complete as to be capable of discrimination. Dr. GRAHAM STEELL repeated these arguments, and showed that the diastolic mitral had sometimes the characters of the presystolic, with a thrill, in evidence that the auricular contraction can suffice to produce these characters. Dr. SHEARER exposed the fallacy of arguing from the intensity of a bruit to the force of the blood stream, citing in support the character of the *bruit de diable*; he also drew attention to the remarkable curtailment of the period of cardiac rest, which must occur if the regurgitant explanation of the prolonged presystolic murmur be accepted. Dr. G. JOHNSON pointed to the difference in conduction of the presystolic and systolic murmurs, and to the interval that elapses between them, as evidence of their independent origin. He also concurred with Professor GAIRDNER as to the occurrence of combined mitral diastolic and presystolic, and could not explain the abrupt termination of the presystolic bruit on the regurgitant view. Dr. BALFOUR combated the objection as to the inadequacy of the auricle to supply sufficient force to generate a bruit of the character of the presystolic, by pointing to the high tension of the blood in the pulmonary circuit. Dr. SANSOM agrees with the views of Dr. GAIRDNER, but objects to the term "auricular-systolic" as applied to the murmur, and would prefer the word "presystolic." Dr. BROADBENT pointed out that this did not occur in mitral regurgitation where there is the same increase of pulmonary tension. Dr. BALFOUR says he considers the

[1] THE LANCET, 1875, vol. ii., p. 351.

duration of the diastolic mitral to be an index of the degree of obstruction; and compares the alleged "continuity" of presystolic and systolic murmurs with that of the double aortic bruit. Dr. SAINSBURY pointed to the post-mortem evidence of auricular hypertrophy, and emphasised the doctrine that loudness of a bruit does not imply force in its production.

The debate at the Medical Society turned almost wholly in favour of the "orthodox" view, if we except, of course, Dr. DICKINSON'S speech, and the indisposition of Dr. SANSOM to accept the auricular-systolic mechanism; for Dr. BRISTOWE, in his elaborate exposition of mitral obstructive murmurs, covered the whole ground, and maintained a position which has not been met by the arguments of the other side. So completely did this paper traverse the question that the subsequent speeches added but little that was fresh, although the Society had the opportunity of examining cases in point. Moreover, it is indisputable that cardiographic tracings, such as those shown by Dr. SANSOM, those of Dr. GALABIN, published in Guy's Hospital Reports (1875), and some which Dr. PAUL CHAPMAN has sent us, support the original notion propounded by Professor GAIRDNER; and as it is only through the cardiograph that we can, independently of the ear, gain knowledge of the actual working of the living heart, we are bound to pay regard to its teachings. In fine, we do not think that the case, ably as it has been presented, has been made out in favour of the regurgitant hypothesis. Perhaps it may be allowed to slumber for another fifteen years, by which time, let us hope, some more certain criteria of the action of the heart in disease will be known.

IT is necessary that the ethics of professional work done "for the good of the public" should be formulated and clearly laid down. The time has arrived when the honour and dignity of the profession demand that a well-considered expression of opinion should be obtained, and by common consent adopted as the guiding rule of practice, to which all will, and in a sense must, henceforward conform, unless, every man doing that which is right in his own eyes, the self-respect of the medical body is to be sacrificed, and the well-being of the many ruthlessly set aside by the impatience or the ambition of the few. The promulgation of hints and suggestions for the management and self-management of the mind and the body in health is one thing, and we have never been backward in this good work ourselves, or failed to appreciate the efforts of others in the same direction—namely, *the prevention of disease and the conservation of health*; but the management and self-management of mind or body *in disease* is wholly another matter, and against the endeavour to popularise this enterprise we have always protested, and must at this juncture enter a strong objection and raise a warning cry. The two endeavours are totally and radically different. The one aims to teach such facts in anatomy or physiology as may be intelligently applied by the non-professional public to the furtherance and preservation of health; the other is a positively mischievous and wholly insincere pretence of enabling and helping laymen and women to do that for themselves and others which it is impossible they should do—namely, treat diseases. We say it is mischievous, because harm must be done by this encouragement of unskilled self-physicking and physicking others. We say it is insincere, because the merest tyro in medicine knows perfectly well that the thing is beyond doing rightly or safely. It would be a dereliction of duty on our part not to speak out plainly on this subject. THE LANCET has done much to popularise the laws of health. Scarcely a week has passed during many years in which we have not issued specially-considered and purposely-written leaderettes or annotations with the express purpose of informing the public, through our medical readers, on subjects of health preservation and the prevention of disease. Nor have we been backward in encouraging this enterprise for the public good whenever and wherever it has been legitimately carried out by qualified members of the profession. We are especially desirous to draw a sharp line at the limits of that which is legitimate labour for the public good, and to mark off as obviously incompatible with the honourable practice of our art all that which lies outside and beyond that boundary.

We cannot deem it possible that any intelligent member of the profession can be seriously in doubt as to the impropriety of those enterprises which are now on foot to inaugurate an avowed propaganda of self-physicking in the family. It is monstrous that the semblance of legitimacy should, even for a moment, be given to such a scheme, by the association therewith of names highly honoured amongst us, and borne by persons who have hitherto been regarded as examples of strict and self-respecting conduct in professional life. Do the experience and observation of many long years go for nothing? Have not those who have been brought into contact with the public by service at hospitals, and as lecturers on science applied to public needs, yet learned that "a little knowledge is dangerous" in everything, and in nothing else so much as in the science and art of healing? Do not these gentlemen perceive that by the very sanction of their names in connexion with undertakings which have for their object the teaching of heads of families and the "public" the managing of those about them "in disease," they are giving the lie direct to all they have themselves said and written about the need of a competent knowledge of anatomy and physiology, of pathology, chemistry, and therapeutics, and even considerable clinical experience, before any man can be competent to prescribe? How are persons without any such knowledge to comprehend and apply the hints and suggestions, or even the "broad principles," they propose to cast before them? We cannot excuse the course taken by those who are engaged in this strangely unreal work on the score of want of acquaintance with the facts. It is impossible that persons so well informed as are the partisans of these enterprises can fail to know what they are doing; and if they do know, it follows that they are either pretentiously attempting the impossible or pandering to a false and mischievous desire on the part of the public to make themselves practically independent of medical advice and assistance, and by thus pandering hoodwinking and misleading those they affect to serve. The management of mind and body in health is a matter of common-sense prudence acting on physiological principles, and not only can be, but ought to be, taught to every intelligent being in the land;

but the management of the mind and body "in disease" is wholly and specifically a matter for the medical practitioner, and none know better than the physicians and surgeons who stand committed to these novel enterprises that by undertaking to carry out the purpose assigned to them they are breaking roughly and wilfully through rules of conduct framed not one whit less in the interest of the public than of the profession, and which it is unjustifiable to transgress.

What, then, are we to conclude? Frankly, that, carried away by the impulse to achieve popularity or dominated by some mistaken ambition to appear philanthropical, the promoters of these extraordinary schemes of "usefulness" have placed themselves in a position which must be seen to be untenable, and from which they will feel compelled to retreat. We decline to believe that any respectable member of our profession is *consciously* animated by the sordid motive of gain in such a transaction. We do not conceive it possible that it can have occurred to any of those who have committed themselves to the task of teaching the public how to physic themselves and those about them, that the parade of their names and professional qualifications in connexion with these works, coupled with the "advice" they give, is neither more nor less than "touting." Nevertheless, this is what it really comes to. The position taken up is, we say, a false one, and it must be abandoned—the sooner the better—by all honourable professional men. By all means teach the public to take care of their health, show them how to live healthy lives and ward off disease; but in the name of common sense and professional propriety, for the public good, not less than the dignity of the profession, abstain from "quackish" discourses about management in disease. The boundary line between the legitimate sphere of usefulness and that which lies outside and beyond it, and which is not merely useless but harmful, is so clear that it cannot be overlooked or mistaken, except by those who wantonly go astray.

THE passing of green-coloured stools several times a day by infants is dependent, according to M. LESAGE, on the action of certain micro-organisms which he has succeeded in isolating, cultivating, and demonstrating, to his own satisfaction at least, to be the sole pathogenic agents.

M. LESAGE describes two varieties of green diarrhœa. The first is really of biliary origin, for the greenness of the stools is due to biliverdin, and a chemical examination of them demonstrates the presence of bile acids. The reaction of the stools is acid, and this acidity persists even after much dilution, microscopical examination of this variety of green motion having discovered the presence of a large quantity of biliary crystals and cholesterine, and of a certain number of ordinary microbes. The chromogenous bacillus, to be studied hereafter, is entirely absent. This bilious diarrhœa generally appears on the fourth day of life, and ceases by the twentieth or the twenty-fifth. It may supervene in breast-fed or hand-fed infants, is not accompanied by dyspepsia, and does not lead to emaciation. The number of stools is very variable. It appears to be due to an augmentation of the biliary secretion, which lights up a slight enteritis with acid secretion. At a necropsy, twenty-five minutes after death, of such cases, the whole of the intestine contains in its interior much bile of highly acid reaction. Attacks of this form of diarrhœa may be met with also between the ages of two and six months, especially in tuberculous infants.

The second variety of green diarrhœa is very different, for the green colour of the stools is the result of the activity of a special micro-organism. The fæcal matter only contains traces of bile, quite insufficient to explain the special colouration. In athrepsia and in tuberculosis, as the result of steatosis of the liver with consequent acholia, this slight quantity of bile may even be wanting altogether. Chemical examination demonstrates the presence of a special pigment. According to STEINER, in half the cases the stools are neutral; in the remainder the reaction is slightly acid, and mere dilution abolishes even this acidity. At the necropsy, made immediately after death, the intestine is found to be neutral throughout its entire extent if the stools are neutral and the acidity is localised to the colon when the stools are acid, so that the acidity must be developed in the large intestines.

The special micro-organism is a bacillus of varying length, according to the part of the intestine it comes from, to the medium in which it is cultivated, and to its age. The adult form is from 2 μ to 3 μ long and 1 μ broad; it is rectilinear and uniform along all its length; its extremities are slightly rounded. With advancing age it increases much in length, and forms a filament which may be from 5 μ to 20 μ long; it may become sinuous and twisted, or even doubled on itself. It has a certain degree of mobility, less marked than the typhoid bacillus. The bacillus reproduces itself by fission and sporulation: by the former method in the intestine and on potato cultivations; by the latter, outside the organism and on gelatine media, at a temperature of from 20° to 22° C. GRAM'S method is useful for staining this bacillus. The bacillus under different circumstances produces pigment which is not visible in thin layers, but the green colour is very marked in potato cultivations, and lighter in tint on gelatine. A similar variation may be observed in stools. The green tint is heightened by the presence of oxygen; but it has no relation to the bile pigments, for it is not extracted from solutions containing it by alcohol, ether, or chloroform. Saturated solution of sulphate of ammonium may form a solution of the pigment, whose chemistry has not yet been completed. The pigment is not identical with that produced by the micrococcus pyocyaneus. The bacillus may be cultivated in neutral peptonised gelatine, and in serum and agar-agar. Its characteristics are: (1) a green colour of variable tint; (2) the slowness with which it liquefies gelatine; (3) the greenish mantle which forms as the result of the growth of the bacillus on artificial media with a gaseous surrounding. Is this chromogenous bacillus the cause or the effect of the diarrhœa? To this question M. LESAGE gives the answer that the bacillus is the real cause of the diarrhœa, and this conclusion is arrived at as the result of experimental research. The injection subcutaneously of the bacillus gives rise to no lesion or disturbance. The injection of half a Pravaz-syringeful of the pure cultivation into the venous system of a rabbit is followed at the end of ten or twelve hours by the appearance of the pathogenic bacillus and of green diarrhœa. The injection of the bacillus into the intestine (by laparotomy)

of young dogs and cats produces the green diarrhœa. The same result ensues if the stomach is the way of entrance, for the gastric juice of a fasting animal only retards the growth, but does not kill the bacillus. The transmission of the bacillus by the atmosphere has been demonstrated by various experiments, according to M. LESAGE. In discussing the treatment of this form of diarrhœa, the reaction of the alimentary canal is first considered. It is not, he maintains, true that the reaction is acid throughout the intestine, even when the mouth and the colon give an acid reaction; the rest of the intestine is neutral. Lactic acid is the best medicament. (See THE LANCET, vol. i. 1887, p. 1149.)

Annotations.

"Ne quid nimis."

SUMMER MORTALITY, 1887.

NOTWITHSTANDING the high temperature that prevailed during July and the greater part of August, it appears from the Registrar-General's last quarterly return that the public health, judged by the recorded death-rate, was below the average during the third or summer quarter of this year. The English annual death-rate during the three months ending September last was 17·6 per 1000, a rate slightly below both the mean rate in the corresponding quarters of the ten years 1877-86 and the rate in the third quarter of last year. The summer death-rate is to a large extent governed by the mortality from infantile diarrhœa, which, in its turn, is mainly dependent upon temperature. The rate of mortality from diarrhœa in the whole of England and Wales during last quarter was equal to 2·1 per 1000, against 1·8, the mean rate in the ten preceding corresponding quarters. As diarrhœa, however, is specially fatal in large urban populations, it will be well to note the mortality from this disease in the twenty-eight large towns dealt with in the Registrar-General's Weekly Return. In these towns the death-rate from diarrhœa last quarter was 3·3 per 1000, against 2·8 in the ten preceding summer quarters, in which the rate ranged from 1·2 in 1879, to 4·2 in 1878 and 4·5 in 1880. The annual death-rate from diarrhœa in the twenty-eight towns, under the influence of the exceptionally high temperature during July, rose steadily from 1·5 in the first week of that month to 5·5 in the first week of August, which was the maximum weekly rate in the quarter. The highest rate in any week of 1886 was 5·7 in the second week of September. The diarrhœa rate last quarter was maintained at 5·3 and 5·0 in the following two weeks of August, after which it rapidly and steadily declined week by week, influenced by the low temperature in September, to 0·9 in the week ending Oct. 1st. The unseasonably cold weather in September undoubtedly spared the lives of several thousands of infants in England and Wales, who would have succumbed to diarrhœa if the average temperature of the month had prevailed. The diarrhœa death-rate in the last four weeks of the quarter, however, averaged but 1·6 per 1000 in the twenty-eight great towns, whereas in the corresponding period of 1886 the rate was as high as 4·6. The diarrhœa rate last quarter, which, as we have seen, was 2·1 in the whole of England and Wales and 3·3 in the twenty-eight largest towns, was 2·2 in fifty other large town districts, and 1·4 in the remainder of England and Wales, exclusive of the seventy-eight great towns. The variations between the diarrhœa rates in different towns were as unaccountably wide as in previous summers; they ranged last quarter in the twenty-eight towns from 0·8 in Halifax, 1·1 in Huddersfield, and 1·6 in Bristol, to 4·7 in Salford, 6·4 in Leicester, and 7·6 in Preston; and in the smaller towns from 0·4 in Southport, 0·6 in Rochdale, and 0·7 in Gloucester, to 5·5 in Chatham and 6·3 in Wigan. The Lancashire towns, as in former summers, showed generally high death-rates from diarrhœa, but some satisfactory elucidation of the causes which produce such variations as 0·6 and 1·7 in Rochdale and Oldham, and 6·3 and 7·6 in Wigan and Preston, is still urgently needed in the best interests of sanitary progress.

SIR HENRY ACLAND ON THE ARMY MEDICAL SCHOOL.

SIR HENRY ACLAND has done well to allow his Address to the Army Medical School, delivered in July at the distribution of prizes, to be published. It might be thought that one of less eloquence and authority than Sir Henry Acland might have sufficed to vindicate the claims to continued existence and increased support of the Netley School. But it is not so. The scandalous calamities of the Crimea are now far enough off to be forgotten by eager politicians who think they can make a little party capital out of any proposal of paltry economy, which may not bear disastrous fruit till their petty purposes are served. But they are not forgotten by the nation, and will not be suffered to recur for want of the few thousands a year that the Netley School costs. This is not the time when we can afford to relax the cultivation of military hygiene and medicine. Our army and navy are too small, and the duties and the distances to which they are called are too great, to allow any such experiment. If anyone is in doubt on this subject, let him read the stirring words of Sir Henry Acland, in which he relates the origin of Netley School in the sufferings of our Crimean troops—"sufferings..... in which sickness destroyed far more than were slain by the sword or the projectile, and which were such as to shock the most thoughtless." The very triumphs of medicine and hygiene tend to make nations forget what will happen if they fail to cultivate these sciences, especially as affecting the services on which our safety depends. But Sir Henry spoke not only to public men who on superficial financial grounds would starve or abolish such a school as Netley, but to the students and candidates of the school, and gave them much good advice. Few men were more fitted or entitled to give it, or to commend to them the great lessons and the great teachers of recent years in respect of army medical organisation, and to inspire them with lofty thoughts in repairing to the distant dependencies of the Empire on their beneficent mission.

HUMAN LOCOMOTION.

M. MAREY, whose brilliant researches into the kinematics of animal movements are so well known, has, in collaboration with M. Demeny, been making a series of observations upon human locomotion, of which a highly interesting account appears in a recent number of the *Comptes Rendus* of the Académie des Sciences. The method employed has been that of "photo-chronography," and the experiment is described as follows:—"In order to obtain a representation of the movements of torsion about a vertical axis, we covered a floor with black velvet, and caused the subject of the experiment, attired in white, to pass beneath a photo-chronograph placed vertically at a height of about 40 ft." In this way the investigators obtained a series of successive images, from which they publish a selection, displaying movements complementary to those movements in the vertical plane which have been photographically registered some time ago. In order to obtain more exact materials for measurement, they clothed their subject in black, and fitted to his shoulders and hips white wands, marking the transverse horizontal axes at these points. Of the index lines so depicted they obtained a series of photo-

graphic drawings at intervals of one fiftieth of a second. These, when viewed from above, afford of course a measure of the torsion of the trunk about a vertical axis; viewed horizontally, they exhibit the torsion about the antero-posterior axis. A third white wand attached along the spine and projecting above the head affords indications of the "movements of totality"—that is to say, of balancing movements by which the whole body is inclined forward or backward or to either side. The joint authors give a minute analysis of the results which they bring out, and a careful description of the torsions to which the body is subject in walking and running, and their most interesting result is an approximate proof that at a walking pace the movement of the head is by compensatory motions in the trunk reduced to a minimum, and assimilated closely to that of the centre of gravity of the whole body. This they prove by means of an ingeniously constructed diagram, in which the trajectories of head, shoulder, and hip are brought together for comparison. It then appears that the trajectory of the head lies always midway between those of the shoulder and hip, so that the middle point of a line joining hip and shoulder would have a motion almost identical with that of the top of the head. There still remains, however, the antero-posterior swaying of the body to be allowed for, but this in walking amounts to very little more than zero. A further investigation of this interesting relation is, however, promised in M. Demeny's name, and will doubtless well repay the attention that is being bestowed upon it.

SMALL-POX HOSPITALS.

A CASE of some importance to sanitary authorities came before Mr. Justice Stirling, in the High Court of Justice, on Tuesday. The guardians of the Wortley Union, a district adjoining the borough of Sheffield, had hired for use as a small-pox hospital a house abutting on a road leading to three other houses, which were situated at a distance of less than fifty yards from the hospital. Application was made by these inhabitants for an injunction to restrain the guardians from the use of the house in question as a small-pox hospital. On the first hearing Mr. Justice Stirling expressed the opinion that the case was a proper one for an independent inquiry by a person skilled in such matters, and he accordingly appointed Mr. Shirley Murphy to inquire and report to him as to whether, by reason of the situation or management of the institution or otherwise, there was any danger to the plaintiffs, or any of them, in its being used as a small-pox hospital. After inspection of the locality, Mr. Murphy reported that there was danger, but the danger was slight, amounting rather to a possibility than to a probability of infection arising from the hospital. His lordship, in giving judgment, said that the position of the law was clear; the burden of proving that the use of this building was a nuisance lay upon the plaintiffs, and the question was whether the amount of injury was sufficient to justify the Court in treating this as a nuisance to be restrained by interlocutory injunction, and, in the words of Lord Justice Cotton, in the case of Fleet *v.* the Metropolitan Asylums Board, there must be "an appreciable injury to the healthiness of the plaintiffs' property. The plaintiffs must make out that there was real danger, otherwise, however much they might feel the hospital to be an annoyance, they could not get an injunction. In the present case it was true that the amount of the danger was not very great, but, on the other hand, it was a case in which from the particular nature of the disease its damage might be of an irreparable character." He therefore granted the injunction. We may comment on the wisdom of the course adopted by the learned Judge in obtaining independent skilled assistance for the purpose of enabling him to arrive at a conclusion—a far preferable method to that of merely hearing the often conflicting evidence of witnesses.

THE PARKES MUSEUM.

WE are sorry to see that this excellent institution is in want of funds, and that unless assistance is forthcoming its career must close. A powerful appeal has been made to the public and the profession by the members of council, and we feel sure that our readers will not allow these gentlemen to appeal in vain, more especially as they themselves have given very solid proof of the disinterested earnestness with which they heretofore have supported the museum. Eleven years ago the museum was only an idea; now there is a building, a very extensive collection of sanitary apparatus, and a large and valuable library, which is daily growing. The total cost of supporting the museum and library is, we believe, something under £700 a year, and it is still impossible to think that this modest sum will not be forthcoming. It is pointed out that the museum is a purely educational museum; and certainly the lessons to be learnt in it are of the utmost importance to the medical profession, who cannot afford in the present day to be ignorant of the details by which we seek to secure health in our dwellings and elsewhere. The professors and teachers of hygiene at all the chief medical schools bring their pupils there for practical instruction, and were the museum to be abolished our medical schools would feel the want of it. It has been used also for examination purposes, and we should hope that the great examining corporations will see their way to making a grant for the support of an institution which is of real importance for the practical teaching of medical students. Those who become members or life members will not only be helping the museum to continue its career of usefulness, but, as appears by the winter programme just issued, they will have their money's worth. Eleven lectures are to be given during the winter and spring, and of these the first was given by the Earl of Meath on Thursday last. Sir Douglas Galton will lecture on Smoke and Fog on Dec. 1st, and Mr. Shirley Murphy on Scarlet Fever on Dec. 15th. The first lecture in 1888 will be on Jan. 5th, on Hygiene in Childhood, by Dr. Angel Money, and on Feb. 2nd, Professor Crookshank will take for his subject the History and Present Position of the Germ Theory of Disease. Dr. Payne, whose antiquarian lore is well known, will discourse on Plagues Ancient and Modern, on Feb. 16th; and he will be followed at intervals of a week or a fortnight by Dr. Sims Woodhead on Milk and Disease, Miss Chreiman on Physical Culture, Mr. A. S. Murray on the Physical Training of the Greeks and Romans, Mr. Justice Cunningham on the Public Health in India, and Professor Hayter Lewis on Ancient and Mediæval Towns. Membership and life membership give admission to the lectures, and also the free use of the museum and library, and we trust that many of our readers who have not already done so will come forward, and by participating in the advantages of the museum help to secure its benefits for others.

THE MEDICAL FACULTY OF LYONS.

THE Medical Faculty of Lyons, which has just completed its first ten years of existence, has great reason to be proud of the success which has attended its formation. It now boasts of nearly 800 students, and is therefore one of the largest medical schools in Europe. But it is not only of numbers that it has cause to be proud. Although its *alumni* are necessarily as yet but very young men, they have successfully asserted their superior ability in several of the *concours*, or public competitive trials for professorships, lectureships, prizes, &c. The Lyons Faculty is now able not merely to provide all its own junior teachers for itself, but it has given teachers to other Faculties. Thus, up to the present time Lyons students have gained five professorships; besides, fifteen are *agrégés* or

assistant professors. Perhaps the greatest compliment which the Lyons Faculty has received was when Paris took Professor Chauveau to be Professor of Physiology. There has always been a tendency for the Paris Faculty to overshadow the French provincial Faculties far too completely for its own good; therefore the exhibition of the healthy rivalry of one or more of the provincial schools is much to be rejoiced at, even for the sake of the great metropolitan Faculty itself. If Lyons, Montpellier, and Bordeaux held the same relationship to Paris that Leipsig, Munich, and Bonn hold to Berlin, it would be far better for the cause of medical science in France.

RABIES.

THE method of discussing any subject by the use o questions is generally suggestive and almost always instructive. The interrogative method has been adopted by M. Duboué in his pamphlet entitled "Des Progrès accomplis sur la question de la Rage,"[1] which discusses the part played by the nervous system. We reproduce the questions asked and answered in some measure by M. Duboué, who is a firm supporter of Pasteur. Is the virus of rabies propagated from the bitten part towards the medulla by the agency of the nerves? Granted that the virus is transmitted during the period of incubation by the nerves, and in a centripetal direction, may we conclude also that its transmission is effected equally in an opposite, centrifugal direction? Further, is the virus propagated through the agency of the sensory or of the motor nerves, or do both kinds of nerve convey the poison? Is the duration of the period of incubation to be explained on the distance between the bitten or inoculated part and the spinal bulb? What influences are exercised by age and mode of alimentation of the inoculated animals and by the rectilinear or angular direction of the contaminated nerves on the duration of incubation? When once the virus has reached the bulb in a centripetal manner, is it then reflected along other nerves in a centrifugal fashion? If the answer be in the affirmative, which can only be ascertained by experiment, which are the affected nerves? Does the poison pass across from one side of the cerebro-spinal axis to another, or does it remain limited to the side first affected? At what exact moment of time does the saliva become virulent? Does this occur only during the period of incubation, or only during and after the period of invasion? Are other liquids than the saliva infective—as, for example, the bronchial mucus and those liquids which come in contact with the contaminated nerves? Perfectly satisfactory answers to these questions would certainly advance our knowledge considerably, and the knowledge attained would hereafter prove of value in the rational treatment of this fell disease.

SMALL-POX IN MILAN.

AN Italian correspondent writes:—"The small-pox epidemic now prevailing in the Lombard capital is of serious import for the English-speaking traveller, who, if he seldom resides for any considerable time there, is in the habit of making it a half-way house, to the number of many thousands every season. As in Florence, so in Milan the disease has declared itself among the non-vaccinated, and, to a smaller extent, among those imperfectly vaccinated. To the former category belong the infant victims; to the latter the adults, many of whom have reached ages averaging from sixty to seventy years. This outbreak, as the Milanese journals indicate, is another warning to the Italian Government to lose no time in enforcing a universal system of compulsory vaccination throughout the peninsula, and in putting an end, once for all, to the inadequate precaution which contents itself with making admission to school, to the army, or to the civil service conditional on the applicants having been vaccinated. Meanwhile the Town Council is offering every facility for primary or secondary vaccination—all classes, both in city and suburb, being freely invited to avail themselves of the prophylactic gratuitously afforded in the Piazzale delle Galline. As an additional inducement to have the operation performed or re-performed, the authorities announce that the supply of lymph has been greatly improved in quality. The trials made of this fresh supply by Professor Grassi have answered all expectations, and the Vaccination Committee congratulate themselves on having now for the sixteenth time, during their nineteen years' experience, so ensured the efficacy of the prophylactic that nothing but its compulsory enforcement is wanting to make small-pox as rare in Italy as it has long been in England, France, or Germany.'

[1] Paris: G. Masson, Boulevard St. Germain.

THEORIES OF HOSPITAL REFORM.

OUR contemporary, *Charity*, gives an account of an essay on Hospital Reform, by Mr. Richard Moreland, honorary secretary of the Finsbury Dispensary. Mr. Moreland's views seem somewhat peculiar. According to one of these, much of the financial depression of hospitals is due to "the fact that committees, medical staffs, and nurses do not in many cases act sufficiently in concert." More seriously still, he attributes much of the want of harmony to the medical staff, who, according to the representation of his views in our contemporary, "are continually at loggerheads," because each one wants to have the patients treated according to his own peculiar theory. The nurses catch the contagion of this discord, and the time of the committee is spent in adjusting quarrels which should be spent in more profitable and creditable work. We cannot but think that this is rather a far-fetched theory of hospital difficulties, and, so far as regards the medical staffs, essentially an inaccurate one. We are glad to see that, in spite of the blame he attaches to the medical staff, Mr. Moreland is, somewhat inconsistently, disposed to give them more active interest in the regulations of their hospital. Mr. Moreland would approve of patients contributing to their maintenance; and of nurses, sisters, students, and probationers paying special fees. He would have one or more wards in each institution constantly closed, and so reduce expenses and permit of cleansing. Further, he advocates the merging of smaller hospitals into larger ones, with a view to reducing expenses of separate maintenance. Some of these views are highly worthy of consideration, others are more doubtful; but none of them go to the bottom of the financial difficulties of hospitals, which are to be found in an imperfect conception of the suffering they are calculated to relieve. When this is once realised, the wealthy will pour their money into the treasury of hospitals.

THE WATER-SUPPLY OF BADSEY.

THE inhabitants of Badsey in the Evesham rural district are a people easily contented as regards their water-supply. They have evidently no knowledge of Sir John Simon's writings; otherwise, instead of talking about a low death-rate in connexion with the state of their existing wells, they would bear in mind what he said as to arrears of impunity in the matter of neglected filth being often cancelled in one dreadful blow. But they have even endorsed a resolution to the effect that their water is, except in a few cases, too good to be set aside for another. In one instance a grave was being dug in Badsey, but it commenced to fill with water, and during the time occupied in conveying the coffin from the church the grave became flooded. The result was that the water had to be baled out, but it

was found that this operation had almost dried a well supplying two houses. After rain, some of the water becomes the colour of porter, but this does not suffice to condemn it in the minds of the villagers. They are apparently scientifically inclined, and they prefer basing their final judgment on the result of a quantitative examination of the water such as chemists usually supply, to forming any estimate on such trivialities as obvious churchyard soakage and porter-like colour. We believe the Local Government Board have the question in hand, and it is possible that, in view of such evidence of contamination as is forthcoming, they may not be so particular as to the chemical constituents of the filth that soaks into these wells.

AN ARTIFICIAL ATMOSPHERE FOR PHTHISIS.

DOUBTLESS a perfect atmosphere for cases of chest disease, and especially phthisis, must remain for a long period a utopian idea. The subject of an artificial atmosphere was raised recently at the Biological Society of Paris by M. d'Arsonval, who described several apparatus constructed by him for permitting patients, and especially phthisical ones, to respire an artificial atmosphere, and he showed a means by which the inspired air should be uncontaminated by the fluid in the expired air. Dr. Brown-Séquard, in the discussion thereon, said it would be very important to settle this point in the hygienic treatment of *poitrinaires* and others. He had tried to employ an atmosphere containing a rather larger percentage of oxygen than the normal of ordinary air; but he found that when the oxygen was in too great a quantity irritation resulted, causing considerable distress, even when the carbonic acid eliminated remained normal. If, nevertheless, a mixture in determined proportions of carbonic acid and oxygen be made in an artificial atmosphere, these phenomena of intolerance were no longer produced. It is known that carbonic acid, besides its anæsthetic property, exercises a cicatrising effect on wounds. It is possible to comprehend how, in cases of tuberculosis, a diminution of reflex sensibility, and consequently a lessening of cough, may be afforded, whilst at the same time the pulmonary lesions may be favourably influenced, by carbonic acid.

PUERPERAL PEPTONURIA.

PEPTONURIA accompanies every normal accouchement, but it does not always present identical characters, and certain causes may modify its intensity and its duration. According to M. Barone, it is but little marked on the first day of the puerperium, but augments on the second and the third, attaining its maximum on the fourth. From this point it gradually decreases, undergoes a manifest augmentation towards the eighth or ninth day, and then again lessens until the twelfth, when it disappears. This peptonuria is explained as a collateral phenomenon of the involution of the uterus, and it is not necessary to suppose that a purulent exudation is concerned in its causation. It has been remarked that if the fœtus is macerated, peptone is not found in the urine, or only in small quantity; the diminution is in direct relation with the time that elapses between the death of the fœtus and its expulsion from the womb. It appears, then, that involution may be more rapid than when the child was born alive. Urine passed on the last days of gestation also contains peptones, which may also be found during parturition. Peptonuria has no relation with the kind of uterine contractions, nor with a painful or prolonged parturition. Uterine involution follows the same course as the peptonuria; the two conditions vary concomitantly; when the uterus has sunk to the level of the symphysis pubis peptone is no longer found in the urine. The specific gravity of the urine augments in direct parallelism with the increase in the peptones. M. Barone concludes that the peptones formed in the uterine parenchyma behave themselves in regard to the blood precisely as do the peptones of digestion, and as do also the peptones artificially injected into the blood.

THE ANTI-VACCINATIONISTS AND THE LORD MAYOR.

THE Lord Mayor has begun well. Being asked to allow the use of the Mansion House for a public meeting on the question of compulsory vaccination, his lordship sent the following answer through his secretary:—

"The Mansion House, London, E.C., Nov. 12th, 1887.

"DEAR SIR,—I am directed by the Lord Mayor to say not only that he must decline the request of your committee to grant the use of the Mansion House for their meeting, but that he is most thoroughly opposed to their sentimental antagonism to a recognised, wise, and humane law.

"I am, Sir, yours very truly, W. J. SOULSBY."

The trumpet of public men is apt in these days to give an uncertain sound on life and death questions. The morbid desire to please is a public evil. The Lord Mayor might as well be asked to allow a meeting at the Mansion House to discuss the expediency of fire brigades. His decision is refreshing, and will enhance public respect for the Mansion House.

HONOURS IN BRUSSELS AND IN PRUSSIA.

AT the recent third examination for the degree of Doctor of Medicine in the University of Brussels 10 candidates were successful, all but one of them obtaining more or less "distinction"; thus 2 obtained "the highest distinction," 3 "great distinction," and 4 "distinction." It is instructive to compare this list, which is of the usual character for Brussels, with the statistics issued by the examining commissions of the ten Prussian universities charged with applying the test, not for medical degrees, but for the mere licence to practise. During the examination year 1886-1887 694 candidates, many of them already Doctors of Medicine, were examined. Of these 505 passed, 270 obtaining the mark "good," but only 20 the mark "very good." The University of Berlin sent the largest number of candidates (232), that of Marburg the smallest (35). The Pharmaceutical Commission reports that 270 candidates were examined, of whom 218 passed.

THE LANGUAGE OF PRESCRIPTIONS.

THERE is among medical practitioners an increasing disposition to substitute for the series of classical terms hitherto usual in prescribing, their simpler and more accurate equivalents in the vernacular. The reform is one which has our approval. In making this admission, however, it is necessary to define with some preciseness the extent of its application. For the purpose of the present argument a prescription may be conveniently regarded as consisting of a professional and a popular part, the former being concerned with a statement of drugs and their quantities, the latter with directions for their use. The first great requisite that should belong to such directions is, we take it, clearness. Their meaning must be plain beyond all chance of misunderstanding on the part of inexperienced dispensers, a result hardly to be expected if words, phrases, and abbreviations are clothed in a garb of studiously quaint antiquity. The advantage conferred by a common scientific language is in this connexion, as a rule, wholly inoperative, since a translation of injunctions to the patient is not usually required, and, should it be needed in consequence of a change in the medical attendance, is not difficult to obtain. Doctor, chemist, nurse, and patient are here on common ground that has less to do with medicine than with attendance on

the sick, and their simplest and surest means of communication is the native tongue. It is otherwise when we come to component parts and quantities of a prescribed mixture. These are the special concern of practitioners, and a clear and easy understanding among all such, of whatever country, with regard to the means of treatment, is of the first importance. Alike for this purpose and to allow of advisable brevity, the use of one common medium of expression is decidedly preferable to any other system. We are therefore of opinion that the best and most natural result of the reform in prescribing which is now in progress will be to leave the body of the prescription in its present convenient though antique form, and to ensure the most accurate observance of instructions to the patient by expressing these in the language of every-day life.

DIPHTHERIA AT SHIRLEY.

SOME of the principal inhabitants of Shirley, which lies within the borough of Croydon, have, after exhausting every other attempt to secure a remedy, appealed to the public press in order to expose an alleged default of the Corporation to deal with a condition of nuisance which is locally believed to have been the cause of diphtheria. The place, it is stated, has been provided with sewers and sewer ventilators, and by means of these latter the air of the place is contaminated, and fatal and preventable disease is induced. Failing to get any local redress, the complainants last January laid their case before the Local Government Board, who, after an incomprehensible delay, suddenly sent down an inspector, who arrived without notice, and failed to see many of the principal persons concerned. A recommendation was then made to the effect that pipe ventilators be provided for the sewers; but after six months' interval nothing whatever has been done, and both diphtheria and scarlet fever are alleged to be still in the place. Few things are more difficult than to eliminate all sources of error due to personal communication at school and in other places, and to state decisively that diphtheria has been due to sewer emanations. But it is equally certain that unless some other cause can be assigned without risk of error, it is nothing less than culpable to leave such obvious conditions of nuisance untouched, and this for nearly a twelvemonth after the first cause of complaint arose. The Croydon Town Council seem about equally divided as to the question of nuisance from the street ventilating shafts, and between the two opposite parties Shirley is allowed to remain without a remedy. We observe that, in a letter to *The Times* of the 17th inst., the chairman and vice-chairman of the Sanitary Committee of the Croydon Town Council aver that "the general health of Shirley is exceedingly good," and that the sewers of the district are not more offensive than those of places where the population is sparse and the quantity of liquid flowing down the sewers is comparatively small.

UNDERSELLING PRACTITIONERS.

IT is lamentable to think that the feelings, if not the circumstances, of medical men in some places have sunk so low that they underbid for appointments. A provincial newspaper contains reports of two instances. We fondly hope that there is some inaccuracy in the statement. In one case there was keen competition between two medical men. When one was appointed club doctor, it was decided that he should receive 3*s.* per annum per member—i.e., 2*s.* a year less than should be paid to club surgeons. But "last week," says our contemporary, "an offer was made to do the work at a cheaper rate—viz., 2*s.*!" In the other instance, the services of a gentleman as medical officer of health were required by the Local Board. The appointment was advertised at a salary of £20 a year. The feeling in favour of the resident gentleman was well known. But a tempting offer was sent in to take the duties for £6! To the credit of the Local Board, they resisted this temptation. We are glad that the names of the places and the persons are not given. But, speaking impersonally, we cannot too strongly express our surprise and regret that any medical man can be found so little alive to the dignity of his profession and the value of his own services as to offer the latter on terms lower than those offered, and for appointments already held by another medical practitioner. Very little different is the conduct of the new practitioner in a district who, by lowering fees to catch patients who can pay higher fees, brings himself and his profession at once into disrespect. Our contemporary says that if this competition among doctors could be extended, doctors' bills would be substantially less. Perhaps so. It does not follow that justice would be done to a liberal profession, or that, in the long run, the public would be better served.

FEVER IN LONDON.

THE trifling decline in the prevalence of scarlet fever, on which we commented in our last issue, has become more pronounced, and during the week ending November 11th 228 cases of this disease were admitted into the Metropolitan Asylums Board hospitals, the number during the preceding week being 265. Scarlet fever is therefore behaving during the present year much as it has done in past years, and we may reckon on the decline being maintained during November and emphasised during December. Already the admissions during the present week have shown that the fall is not merely temporary. Of other diseases, twenty-seven fresh cases of enteric fever were admitted into these hospitals during last week, and one case of small-pox was received, the patient previously living in the parish of St. George-in-the-East. Two patients not suffering from infectious fever were also removed to the hospitals.

FIRES IN HOSPITALS.

PUBLIC attention has recently been directed to the especial horrors which must attend an outburst of fire in a hospital. The terrors of fire breaking out among a bedridden population cannot be over-painted, and it certainly is the duty of the governors of the great medical charities to see that all reasonable precautions are taken for dealing with an outbreak of fire. We have reason to know that in some of our hospitals considerable expense has been incurred in providing buckets, hose, water cocks, fire cisterns, and printed regulations, which are displayed throughout the building. It is difficult to see what more can be done, except in construction with fireproof materials; but as most of the hospitals have not funds enough to adequately pay their way, it seems futile to tell the managing bodies to rebuild. The risk of fire in hospitals is not so great as it is in some other buildings: first, because none of the work carried on in a hospital involves any special danger in this respect; and secondly, because, as a rule, there are nurses and attendants on the alert in nearly every part of the building at all hours of the day and night, and it is not likely that a fire could make much headway without discovery. Nevertheless the danger is undeniable, and it is well to draw attention to it now that winter is fairly with us. There is always some extra risk during the "Christmas entertainments" which it is now the fashion to give annually in many of our hospitals. Most of these entertainments involve extra lights, the transport of lamps, and not unfrequently the illumination of combustible Christmas trees; and it has always been a question with us whether, considering the undoubted risk which they involve, these entertainments

should be permitted in the main building of a hospital. We have no wish to deprive those who unfortunately spend Christmas in hospital of such comfort and happiness as the season may bring, but we feel bound to say that, unless such entertainments can be given without risk, the authorities who have control of the hospitals would do well to limit the Christmas bounty to the distribution of gifts &c. In the construction of a hospital, escape in case of fire should ever be present to the architect's mind. The main thing seems to us to be the provision of sufficient staircases, so that from all parts of the building the patients may have a choice of staircases, which, of course, must be wide enough to allow a bedridden person to be carried down. Many of our hospitals are somewhat antiquated in design, and might doubtless be improved by rebuilding, but that is a matter which rests with the public, from whom the necessary funds must come. The governing bodies cannot be blamed if, without funds for building, they have to make the best of possibly imperfect edifices.

BIRMINGHAM AS THE SEAT OF A UNIVERSITY.

FOLLOWING an elaborate paper by the Rev. Dr. Crosskey at the Philosophical Society, and a discussion on the same introduced by Professor Haycraft, a paper was read by Mr. James Heath, M.A., at the University Graduates' Club, on the 15th inst. The medical element in the scheme is an important one, and closely affects the existing institutions of the Queen's and Mason Colleges. It is to be hoped that the subject will be pursued, and that, if it is to be carried out, some means will be adopted to remove the greater objections, which appear to be mainly of a financial kind. The formation of a degree-giving body should not be the only aim—already numbers of these are present—but the consolidation of existing institutions for the purposes of higher educational requirements, technical and otherwise.

A SCARLATINA CURVE.

IN his last number of the Sanitary Chronicles for Marylebone, Mr. Wynter Blyth gives a diagram based on the statistics of the past thirty years for England and Wales, showing how scarlatina is influenced by season. The deaths are shown to be at their lowest ebb at the end of February and the beginning of March; after this they rise, the increase being rapid during May and June, and then more gradual up to the middle of October, when a steady fall commences. The fall increases rapidly in December; it is sudden during January, and continues until the minimum fatality is again reached soon after the close of February. Every epidemic does not necessarily follow this course; but there are grounds for assuming that our metropolitan prevalence will, in all probability, be governed by much the same influences as those which are indicated in the curve referred to.

GLASSBLOWERS' SYPHILIS.

PROFESSOR E. DE SMET of Brussels, in lecturing on a case of syphilis occurring in the mouth of a glassblower, referred to several epidemics which have been reported as having occurred amongst artisans of this description, and remarked that only two plans for preventing these outbreaks had been devised—viz., giving a separate movable mouthpiece to each man and instituting frequent rigorous periodical inspections of the persons of the *employés*. The first plan is always declared by the workmen to be impracticable from the loss of time which it would occasion by fitting the different mouthpieces on the tubes. The second would of course be resisted by the men, but he thinks their objections could be overcome by showing them the danger to themselves and their families of the present system.

THE HEALTH OF THE CROWN PRINCE.

IN another column will be found an article by Sir Morell Mackenzie on the case of his Imperial Highness the Crown Prince of Germany from the time of his visit to England till his arrival at San Remo. In the report, which is published by the wish of the illustrious sufferer, Sir Morell briefly recapitulates the salient points in the Prince's illness, and states that the extension of the fresh growth since it was first seen has always been upwards. During the last visit of the English laryngologist to San Remo a complete view of the new formation at the lower part of the larynx was for some days rendered impossible by the intense œdema of the mucous membrane, which, in Sir Morell's opinion, was due to limited perichondritis, probably set up by the growths which have been formed from time to time in the larynx. It is the opinion of Sir Morell Mackenzie that, although the nature of the growth which has lately appeared has not been determined by microscopic examination, it presents every appearance of cancer.

THE OBSTETRICAL SOCIETY.

ON Wednesday next, the 23rd, the meeting of this Society will be devoted to the discussion of the subject of Extra-uterine Gestation. Papers will be read by Dr. Herman, Dr. Champneys, and Dr. John Williams. By an error this meeting was put down in our diary last week for the 16th.

STATESMAN AND OPERATING SURGEON.

DR. ZALDIVAR, formerly President of a South American Republic, is now on a visit to Spain. Though considerably occupied with political matters, he finds time to pay attention to those connected with his original profession—that of medicine. Having specially devoted his attention to ophthalmic surgery, he was invited by Dr. Osio to operate in his clinic. The ex-president performed an iridectomy and operations for cataract, pterygium, and several other affections of the eye, in the presence of many of the heads of the profession in Madrid. All were afterwards entertained at a brilliant luncheon by Dr. Osio.

RELATIONS OF HOSPITALS AND DISPENSARIES.

WE direct the special attention of our readers to the Conference to be held on Nov. 22nd, at the Society of Arts, 18, John-street, Adelphi, to discuss recommendations framed by the Medical Attendance Organisation Committee. Sir Spencer Wells will preside. All interested in hospitals and dispensaries and the difficult questions connected with medical attendance on the wage-earning classes should attend.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Ignaz Havas, formerly Dean of the Medical Faculty of Buda-Pesth, at the age of eighty-five.—Dr. Mering, Professor of Special Pathology in Kieff.

A JUST JUDGE ON PATENT MEDICINES.

MR. JUSTICE KAY, in the Chancery Division, in the case of C. A. Vogeler and Co. *v.* Middleton, was asked to restrain the defendants from advertising and selling an oil as St. Joseph's Oil, as being an infringement of the plaintiff's trade mark, and calculated to deceive the public. Mr. Justice Kay said that both the plaintiffs and defendants were vendors o quack medicines which were largely advertised to heal all manner of external injuries. He declined to rule that the

use of any saint's name in the calendar was an infringement of the plaintiff's trade mark. But lest either party should use his judgment as an advertisement, he hoped they would add that no one should employ either preparation except under medical advice. The judge's counsel is excellent. It is too much to expect that the parties to the suit will publish it. But we gladly give it publicity and praise.

CHOLERA NEWS.

ACCORDING to a telegraphic communication, a few cases of cholera still occur at Messina. Malta is now stated to be entirely free from the disease; and clean bills of health have been issued. If this is strictly correct, the final disappearance of the disease from the island must have been rather sudden. On the other hand, the South American continent, which is in such free communication with Italy for purposes of emigration, is again attacked, cholera having appeared in Santiago. Last winter the disease prevailed widely in and about this and other Chilian ports.

WARWICK JOINT BOARD HOSPITAL.

WE are glad to record that, after many difficulties and delays, the Warwick, Leamington, and other sanitary authorities included within the area of the Warwick Union have at last laid the foundation stone of their new hospital for infectious diseases. The hospital is conveniently situated for the more populous localities needing it; and, since it is being erected from the designs of Mr. Keith D. Young, who has had such exceptional experience as regards these buildings, there can be but little doubt that it will be well adapted to the requirements of the district.

FOREIGN UNIVERSITY INTELLIGENCE.

Bordeaux.—The session which is just commencing has already seen the inauguration of the new buildings, amongst which the Anatomical Institute is especially worthy of note; indeed, it has been enthusiastically declared to be the "first anatomical institute in the world."

Buda-Pesth.—Professor Wagner having resigned the chair of Medicine, the post is advertised as open to competition. The stipend is 2500 gulden with a lodging allowance of 400 gulden, a total of less than £300 per annum.

Helsingfors.—This Russian university being in Finland is under different regulations from the others. The language in which instruction is given is neither Russian nor Finnish, but Swedish, so that the scientific work which emanates from Helsingfors finds its way into Scandinavian rather than into Russian medical journals. There are at present 974 students, including 8 women, in the university. Of these only 77 belong to the medical faculty.

Lille.—The Faculties of Law and Arts of Douai are to be moved to Lille, which will then have no less than nine faculties, a unique position for a French manufacturing town. The townspeople, however, are welcoming what may be looked upon as the growing up of a northern university amongst them, and are subscribing a large sum, amounting to something like £100,000, for the erection of the necessary buildings.

Madrid.—Don Francisco Criado y Aguilar, Professor, first of Hygiene and subsequently of Obstetrics, in Saragossa, has been appointed Professor of the Diseases of Children. Don Francisco de Cortajarena, Assistant Professor of Surgery, has resigned his post.

Montpellier.—Bitter complaints are being made that the wishes of the Faculty concerning some questions connected with the appointment of professors have been disregarded by the Government. A desire is being expressed here, as well as in other provincial medical schools, that each Faculty should be allowed a much larger degree of autonomy without the vexatious centralisation which now exists.

Naples.—Dr. G. Nicolucci has been promoted to the Professorship of Anthropology.

Pisa.—Dr. Griffini has been appointed Professor of General Pathology.

Rome.—Dr. Antonio Ceci has been appointed Professor of Surgical Pathology.

St. Petersburg (Princess Helena Pavlovna Clinical Institute).—Dr. Anrep, formerly professor in Kharkoff, has been appointed Professor of Medical Jurisprudence. Drs. Nikitin and Tiling have been appointed *docents* in laryngology and surgery respectively.

Turin.—Dr. Pagliani has been promoted to the Professorship of Hygiene.

THE death of Sir William McArthur, which occurred suddenly, after hurrying to catch a train on the Metropolitan Railway on Wednesday morning last, should not be allowed to pass unnoticed by us. Amidst his philanthropic exertions, his zealous promotion of the Metropolitan Hospital Fund during his mayoralty was most conspicuous, and the financial efficiency of the London medical charities was a subject very near his heart. His occupancy of the civic chair in 1881 was also signalised by the reception at the Mansion House of the members of the International Medical Congress held in London in that year.

FROM the report on the composition and quality of daily samples of the water supplied to London, made by Messrs. Crookes, Odling, and Tidy, to the Water Examiner appointed under the Metropolis Water Act, 1871, it appears that the supply during October was found practically identical in character with that of the preceding three months. All the samples alike from the Thames and the Lea were free from turbidity, and unexceptionable in respect to colour; while the proportion of organic matter present was but small, and very uniformly so, in the different samples examined.

A CHANGE is announced in the editorship of the *St. Petersburger Medicinische Wochenschrift*, Dr. Th. v. Schröder of St. Petersburg, taking the place of Dr. Gustav Tiling. The other members of the editorial staff, Professor E. von Wahl of Dorpat, and Dr. L. von Holst of St. Petersburg, remain unchanged.

WE regret to learn that, on account of illness, Mr. Francis Galton, the President of the Anthropological Institute, was unable to commence his course of three lectures upon "Heredity and Nurture" at the South Kensington Museum on Saturday last. The lectures have been indefinitely postponed.

THE first of a course of post-graduate lectures on Diseases of the Skin was given by Dr. R. M. Simon in the library of the Medical Institute, Birmingham, on the 15th inst. There was a large and appreciative audience, and the lecture was amply illustrated by patients, diagrams, and therapeutic preparations.

MESSRS. P. AND D. COLNAGHI AND CO. have submitted to us a fine etching of Dr. William Harvey, from the picture by Cornelius Janssen, in the collection of the College of Physicians, London. The portrait is an excellent work of art.

WE understand that the appointment of Obstetric Physician to St. Thomas's Hospital has been deferred, Dr. Gervis having agreed, at the request of his colleagues, to postpone the date of his retirement.

DR. OCTAVIUS STURGES has been appointed Assessor to the Regius Professor of Physic in Oxford University.

THE CASE OF

HIS IMPERIAL HIGHNESS THE CROWN PRINCE OF GERMANY,

FROM THE TIME OF HIS VISIT TO ENGLAND TILL HIS ARRIVAL AT SAN REMO.

By SIR MORELL MACKENZIE.

(*From notes supplied by* Dr. NORRIS WOLFENDEN *and* Mr. MARK HOVELL.)

AFTER the removal of the growth last summer, and the subsequent application of electro-cautery, no recurrence of the growth took place. Some general congestion of the larynx remained, and whilst His Imperial Highness was in the Isle of Wight a slight thickening of the mucous membrane on the posterior surface of the arytenoid cartilages near their base was observed by Dr. Norris Wolfenden, at that time in daily attendance on the Crown Prince. At one of my weekly visits I verified Dr. Wolfenden's report, and perceived that the thickening presented the form of a ridge, raised to the extent of about a millimetre, of yellowish colour, and extending horizontally from the outer border of one cartilage to that of the other. The action of the left vocal cord, which had been noticed in Berlin to be slightly impaired, continued in the same state. It should, perhaps, be here mentioned that soon after His Imperial Highness arrived in England a marked disposition to catarrhal inflammation of the larynx and trachea, or fugitive congestion, was observed. A rather sharp attack occurred in the Isle of Wight, and this was followed by general relaxation of the mucous membrane of both the pharynx and larynx. The congestion disappeared whilst the Crown Prince was in the Highlands, and during this period the thickening at the base of the arytenoid cartilages already described was absorbed. On the return of His Imperial Highness to London the condition of the larynx was on the whole satisfactory; the movement of the left vocal cord was much more free, and the voice strong though not quite clear, owing to a slight increase in the congestion having taken place on leaving Braemar. The Crown Prince's general health was excellent.

On Sept. 9th a slight thickening was noticed on the posterior extremity of the left vocal cord, which increased for a few days, and then gradually disappeared, being on the 18th no longer visible. For a few days previous to the development of this thickening the larynx generally had again been more congested. On Sept. 13th Dr. Evans of Paris extracted the Crown Prince's left lower second molar tooth, which was much decayed, the fangs showing the result of a considerable amount of periostitis.

On Sept. 14th an oblong thickening of the mucous membrane, about five millimetres in length and three in width, was observed by Mr. Mark Hovell nearly half an inch below the middle of the left vocal cord and parallel with its free border. Mr. Hovell states that this swelling gradually increased in size, and when seen by me on Sept. 22nd it was nearly round, and measured rather more than half a centimetre in diameter. Two days later the Crown Prince took cold, and on the following day complained of a sense of fatigue, disinclination to take food, and great sleepiness in the daytime. On examining his throat, the left ary-epiglottic fold was found to be œdematous. His temperature was 101° F. In twenty-four hours the œdema had entirely disappeared, and the temperature had become normal. Although the œdema was apparently due to cold, the possibility of its being caused by limited perichondritis was discussed at the time. The acute swelling had no apparent effect on the little thickening below the left vocal cord, *which gradually became smaller, but did not entirely disappear.*

The Crown Prince continued to enjoy good health after his arrival at Baveno, and when I left Italy everything appeared satisfactory, though slight general congestion remained, as well as the thickening referred to previously. On the evening of Oct. 17th Mr. Mark Hovell noticed a marked increase in the congestion of the larynx, both vocal cords being of a bright-red colour. During the next few days the congestion decreased, but on the 21st the hyperæmia again increased in intensity, and was more diffused. On the 27th an increase was noticed in the size of the thickened surface beneath the left vocal cord, and at the same time slight general tumefaction of the left side of the larynx appeared. During the next few days the thickened surface slightly increased, and on the 31st the surface was seen to be irregular, and in one place there was a distinct spur or projection. The next day superficial ulceration of the new formation was noticed, and the left vocal cord was seen to be slightly swollen along its free edge. On the 28th the voice of His Imperial Highness was quite clear, and, indeed, in the opinion of the Crown Princess, was perfectly natural; but since this date the Crown Prince had been much more hoarse. On Oct. 30th a slight reddish projection was noticed beneath the *right* vocal cord; this remained stationary for two or three days, then disappeared, and formed again on Nov. 5th. On Nov. 1st a slight enlargement of the left submaxillary gland was noticed, and this subsequently increased in size.

On Nov. 3rd, the new formation had further enlarged, and was now rather more than a centimetre in diameter, and raised to the extent of about four millimetres. The extension of the growth since it was first seen had always been upwards. On the morning of the 4th, a very slight œdema was noticed at the base of the left arytenoid cartilage, which disappeared in the evening, and was again present on the morning of the 5th.

On the following day I arrived and found the state of the larynx such as Mr. Hovell had described to me. On the afternoon of the 8th, intense œdema of the mucous membrane covering the left arytenoid cartilage was noticed, and in the evening the œdema involved the entire fold, which was tense and red. On Nov. 9th the patient was examined by Professor Schrötter and Dr. Krause, but owing to the œdema it was impossible to obtain a complete view of the new formation at the lower part of the larynx. On Nov. 10th the patient was again examined by the same physicians, and also by Dr. Moritz Schmidt; the œdema was already much diminished, and a good view could be obtained of the whole of the larynx.

In my opinion the œdema is due to limited perichondritis, which, in its turn, has probably been set up by the growths which have been formed from time to time in the larynx. Although the nature of the growth which has lately appeared has not been determined by microscopic examination, it presents every appearance of cancer.

The above report is published by the wish of His Imperial Highness the Crown Prince of Germany. A copy of it was sent on Monday to the *Berliner Klinische Wochenschrift*.

INJURIES DURING THE RIOTS.

By the courtesy of the Surgical Registrars of the Middlesex, St. George's, Charing-cross, and Westminster Hospitals, and the house-surgeons of St. Thomas's and King's, we are enabled to give a few interesting particulars of injuries received during the rioting in Trafalgar-square on Sunday, the 13th. We do not pretend to give a detailed list of those injured. This would be impossible, the number being unknown; but several were treated at Bow-street by Mr. Mills, who was busily employed for some time, and others were treated in or near the Square. It will be seen that Charing-cross Hospital was most busily employed, its proximity to the seat of the disturbance being well known. At this hospital patients were attended to for the following injuries: — Shock 1, contusion of face 6, head 3, arm or hand 6, abdomen 2 (of which one was admitted for a few hours), foot 1; wounds of the scalp 40, face 2, arm 1, hand 2, finger 2, leg 1, bayonet wound of buttock 1, punctured wound over the eye 1. One was also seen for a slight burn on the neck, due to corrosive fluid thrown from a squirt. At Westminster 27 were attended to: 18 for wounds of the scalp, 2 incised wounds of the face, 2 contusions of the arms, 2 contusions of legs, 2 contusions of the abdomen (kicks from horses), 1 incised wound behind the right shoulder (policeman). At St. Thomas's Hospital from fifteen to twenty cases were treated. Of these the great majority were contused scalp wounds, chiefly

of a superficial character, and occupying the occipital and parietal regions; two or three extended to the bone. In only one case were there two wounds on the same patient. The wounds were nearly all linear in appearance. One patient was attended for fracture of the right ulna in the lower third produced by direct violence. Only two cases were admitted, one a youth with severe concussion and fracture of left clavicle, the other a mounted policeman, who received an injury to the hip from his horse falling and rolling upon him. Both are now doing well. About fourteen casualties, some of a serious nature, were treated at the Middlesex Hospital, chiefly contused wounds of the head and upper limbs. A case of cut lip, another of cut eye, an injury to the arm, and five cases of scalp wounds were treated at King's College Hospital. At St. George's Hospital a few scalp wounds and hæmatomata of the head, and a fracture of the clavicle in an old woman who had been knocked down by the crowd, received treatment.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Sheffield Urban District.—Reporting on the health of this borough during 1886, Dr. Sinclair White records a death-rate of 19·7 per 1000, which is 0·9 lower than that for any previous year as to which information is available, a circumstance which involves not only some substantial saving of life, but a corresponding higher degree of vitality in the living by lessening sickness, and hence less poverty and misery. The birth-rate is also the lowest on record. The death-rate from zymotic diseases was 2·88 per 1000, and of the deaths included there were 133 from scarlet fever, 447 from diarrhœa, and 160 from whooping-cough. Dealing with tubercular diseases, Dr. White refers to the possibility that tubercle may be communicated to man by supplying as food the flesh or milk of animals who have already developed the disease, and he considers that just as the danger from food is rendered remote by cooking, so it may be staved off by the boiling of milk. And this leads him to speak generally of the importance, in view of recent researches in bacteriology, of paying great regard to our sources of food supply. As to scarlet fever, the investigations carried out in Sheffield have not as yet tended to connect that disease with the milk service or with any bovine affection. Dealing with the question of the notification of infectious diseases, Dr. White explains that a voluntary system has been in operation since the middle of 1885, and that it has been very helpful. But he cannot say that such a system is satisfactory; its imperfections are numerous, and it breaks down at the most critical point. Lead poisoning still continues in Sheffield from the use of the Redmires water, on which Dr. White reported at length some time since, and the danger is, in his opinion, one that ought forthwith to be dealt with. The report dwells also at length on the nuisance and danger to health arising from the midden-privy system; and in discussing the remedy, prominence is given to the excellent results following on the use of the trough-closet as now constructed with automatic means of flushing. In a record of ordinary sanitary work, we find that disconnexion of house drains has been carried out in no less than 3000 houses, a piece of work that represents a most important effort in getting rid of dangers to public health. The report, like others issued by Dr. Sinclair White, is a document containing an excellent record of work done, and it bids fair to act as an incentive towards still better work in the future.

Salford Urban District.—Dr. Tatham, in his annual report for 1886, calls the attention of the sanitary authority once again to the existence of certain areas which are so wanting in health requisites as to constitute a constant source of danger and of high mortality to the borough. The sewerage in these parts is bad; the state of the Irwell is filthy; the removal of night soil is most objectionably carried out; and the private slaughter-houses constitute a nuisance. On one point Dr. Tatham speaks most emphatically: he declares that until the midden system shall have been entirely and permanently banished from the borough the public health there will never be finally satisfactory. The action of the Manchester and Salford Sanitary Association, and the labours of the ladies and mission women connected with it, receive a grateful recognition; and a record of the services of that body shows how much it has done to improve the conditions of life under which the people live. The annual death-rate for 1886 was 23·7 per 1000 living, and this shows that ground has been lost during the year. The excess was not due to any special disease, although diarrhœal and tubercular affections were more than usually prevalent. In dealing with typhus, Dr. Tatham calls attention to the circumstances under which that disease was imported into the borough by means of gipsies who had been attending a neighbouring fair in their vans, and he refers to the fact that these gipsies moved about in their caravans until, in the end, they could no longer be traced. The story shows strongly the need for the compilation of bye-laws under the recent Act as to the housing of the working classes &c., and for a clause definitely prohibiting the removal of any van containing infectious disease, except under the authority of the sanitary officers. Referring to the compulsory notification of infectious diseases, it is recorded that whereas prior to that system coming into force only 14 per cent. of the scarlatina deaths occurred in public institutions, since its adoption 42 per cent. have occurred in the borough fever hospital. And since the notification has been in force a material reduction has taken place in the rate of that mortality. Appended to the report is an excellent paper, to which we have before alluded, as to the principles which should be held in view by the Town Council in the erection of the new infectious hospital which is in contemplation.

Bethnal-green.—The annual death-rate for 1886 was 23·4 per 1000, which is not only in excess of that for the previous year, but much in excess of the metropolitan rate, which was 19·9. Nearly half the deaths were of children under five years of age, and of those under one year the death-rate amounted to 171 per 1000 births. Of the principal zymotic diseases there were 507 fatal attacks, the heaviest number of deaths being 162 from diarrhœa, 148 from whooping-cough, and 108 from measles. All the various diseases causing death are dealt with in groups, and the conditions leading to them are in some cases considered. The Washington Lyon steam disinfector gives satisfaction, and from Dr. Bate's account of the general sanitary proceedings it is evident that a good deal of attention is now directed to the promotion of health in this metropolitan district.

St. Pancras.—In this district the death-rate was 20·1 per 1000 last year; the deaths under one year being 15·1 per 100 registered births. During the year 290 rooms were fumigated, and a large number of infected articles were dealt with in the disinfecting stove. Whereas the density of population for the metropolis generally was 54 persons per acre in 1881, it has now reached 90 in St. Pancras; and Dr. Sykes finds it necessary to warn the vestry of the extreme importance of retaining such open spaces about houses as can be secured. Amongst the dwellings in which air is obstructed, he refers to cellar dwellings, back-to-back houses, and enclosed dwellings; the latter term relating to some that are obstructed on all sides. As regards such description of accommodation, he recommends that action shall be taken, even if it must be deferred until the expiration of the present leases. Dealing with overcrowding, Dr. Sykes refers to 300 cubic feet as being sanctioned for day and night purposes.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5872 births and 3548 deaths were registered during the week ending November 12th. The annual rate of mortality in these towns, which had been 21·5 and 21·4 per 1000, further declined last week to 20·0. During the first six weeks of the current quarter the death-rate in these towns averaged 19·7 per 1000, and was 1·0 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 9·3 in Brighton, 12·2 in Plymouth, 14·1 in Norwich, and 14·5 in Sunderland. The rates in the other towns ranged upwards to 27·0 in Preston and in Halifax, 29·6 in Oldham, and 28·3 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 464 and 466 in the preceding two weeks, declined last week to 402; they included 111 from scarlet fever, 82 from measles, 58 from

whooping-cough, 53 from "fever" (principally enteric), 43 from diphtheria, 37 from diarrhœa, and 18 from small-pox. No death from any of these zymotic diseases was registered last week in Plymouth, Wolverhampton, or Cardiff, while they caused the highest death-rates in Salford, Bradford, and Sheffield. The greatest mortality from scarlet fever occurred in Norwich, Manchester, Bristol, Salford, Oldham, Birkenhead, and Blackburn; from measles in Derby, Blackburn, Bolton, Birmingham, and Bradford; from whooping-cough, in Birkenhead; and from "fever" in Derby and Preston. The 43 deaths from diphtheria in the twenty-eight towns included 30 in London and 2 in Manchester. Small-pox caused 17 deaths in Sheffield, and 1 in London, but not one in any of the twenty-six other large provincial towns; the 13 cases of small-pox under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease corresponded with the numbers at the end of the previous week. The number of cases of scarlet fever in the Metropolitan Asylums Board hospitals and in the London Fever Hospital had further increased to 2751 at the end of the week, although the number of admissions showed a decline. The deaths referred to diseases of the respiratory organs in London, which had steadily increased in the six preceding weeks from 206 to 506, declined again last week to 438, but exceeded the corrected average by 14. The causes of 76, or 2·2 per cent., of the 3548 deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Leicester, Portsmouth, and in six other smaller towns. The largest proportions of uncertified deaths were recorded in Preston, Sheffield, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·2 and 20·6 per 1000 in the preceding two weeks, further declined to 19·9 in the week ending Nov. 12th; this rate was 0·1 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 15·1 and 16·2 in Aberdeen and Perth, to 23·3 in Greenock and 29·1 in Paisley. The 498 deaths in the eight towns last week showed a further decline of 17 from the numbers returned in recent weeks, and included 26 which were referred to whooping-cough, 17 to scarlet fever, 10 to diphtheria, 8 to diarrhœa, 7 to measles, 6 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 74 deaths resulted from these principal zymotic diseases, against 70 and 66 in the preceding two weeks. These 74 deaths were equal to an annual rate of 2·9 per 1000, which exceeded by 0·6 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 26 in each of the preceding two weeks, were again 26 last week, of which 9 occurred in Glasgow, 6 in Greenock, and 3 in Dundee. The deaths from scarlet fever, which had declined in the preceding four weeks from 23 to 14, rose again last week to 17, and included 7 in Dundee, 5 in Glasgow, and 2 in Greenock. The 10 deaths from diphtheria exceeded the number in any recent week, and included 7 in Glasgow and 2 in Greenock. The 8 deaths from diarrhœa, however, corresponded with the number in the previous week, and were 13 below that in the corresponding week of last year. The 6 deaths referred to "fever," of which 2 occurred in Edinburgh and 2 in Greenock, corresponded with the number returned in each of the preceding three weeks. The 7 fatal cases of measles, however, showed a slight further increase upon recent weekly numbers, and included 3 in Perth, 2 in Edinburgh, and 2 in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the preceding five weeks from 87 to 131, declined last week to 107, and were 16 below the number returned in the corresponding week of last year. The causes of 71, or more than 14 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 32·1 and 31·0 per 1000 in the preceding two weeks, rose again to 32·1 in the week ending November 12th. During the first six weeks of the current quarter the death-rate in the city averaged 28·5 per 1000, the mean rate during the same period being but 19·0 in London and 18·2 in Edinburgh. The 217 deaths in Dublin last week showed an increase of 7 upon the number in the previous week; they included 20 which were referred to scarlet fever, 10 to measles, 6 to diarrhœa, 5 to whooping-cough, 3 to "fever" (typhus, enteric, or simple), 1 to small-pox, and not one to diphtheria. Thus, the deaths resulting from these principal zymotic diseases, which had been 29, 42, and 41 in the preceding three weeks, further rose last week to 45; they were equal to an annual rate of 6·6 per 1000, the rate from the same diseases being 2·4 in London and 1·4 in Edinburgh. The fatal cases of scarlet fever, which had been 8, 11, and 19 in the previous three weeks, further rose last week to 20; the fatal cases of measles and of whooping-cough also showed an increase upon recent weekly numbers. The deaths from "fever," on the other hand, had considerably declined. Nine inquest cases and 4 deaths from violence were registered; and 51, or nearly a fourth, of the deaths registered in the city during the week were not certified.

THE SERVICES.

INDIA OFFICE.—The Queen has approved of the following promotions among the officers of the Staff Corps and Indian Military Forces made by the Governments in India:—Surgeon-Major David John McCarthy, M.D., of the Madras Medical Establishment, to be Brigade Surgeon (dated Aug. 1st, 1887); Surgeon Edward Ferrand and Surgeon Francis Hoskins Pedroza, of the Madras Medical Establishment, to be Surgeons-Major (dated Sept. 30th, 1887). The Queen has approved of the retirement from the Service of the undermentioned officers of the Indian Military Forces:—Deputy Surgeon-General Lewis Stanhope Bruce, of the Bombay Medical Establishment (dated Sept. 15th, 1887), and Brigade Surgeon Charles Edwin Raddock, of the Bengal Medical Establishment (dated Aug. 6th, 1887). The Queen has approved of the undermentioned Officers being granted a step of honorary rank on retirement:—Deputy Surgeon-General Henry Walter Bellew, C.S.I., of the Bengal Medical Establishment (dated Nov. 14th, 1886), and Deputy Surgeon-General Lewis Stanhope Bruce, of the Bombay Medical Establishment (dated Sept. 15th, 1887), to be Surgeons-General; Brigade Surgeon C. E. Raddock, of the Bengal Medical Establishment (dated Aug. 6th, 1887), to be Deputy Surgeon-General; and Surgeon-Major William Nolan, M.D., of the Bombay Medical Establishment (dated Sept. 24th, 1887), to be Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon A. Gorham, to the *Téméraire;* Staff-Surgeon W. P. M'Boyle, to the *Shannon;* Staff Surgeon A. Patterson, to the *Victor Emmanuel;* Staff Surgeon W. F. Spencer, to the *Ajax;* Surgeon J. F. Kellard, to the *Mutine;* Surgeon J. M. France, to the *Shannon;* Surgeon J. Crowley, to the *Urgent;* Surgeon G. T. Brostch, to the *Excellent;* Surgeon E. H. Menden, to the *Téméraire;* Surgeon J. W. O. Underhill, to the *Assistance;* Surgeon H. L. Crocker, to the *Carysfort;* Surgeon B. C. E. F. Gunn, to the Chatham Hospital; Surgeon E. J. Fogerty, to the *Cruiser;* Surgeon J. S. Jackson, to the Walmes Depôt of Royal Marines; Fleet Surgeon Frederick M'Clement, to the *Dreadnought;* Fleet Surgeon Wm. B. Wadsworth, to the *Northumberland;* Staff Surgeon Joseph Wood, M.D., to the *Agamemnon;* Staff Surgeon Chas. L. Vasey, to the *Active;* Surgeon Alexander G. P. Gipps to the *Dreadnought;* Surgeon F. M. Puddicombe, to the *Agamemnon;* Surgeon A. J. J. Johnston, to the *Asia;* and Surgeons Robert M'Ivor and Horace Elliott, to the *Northumberland.*

RIFLE VOLUNTEERS.—1st Ayrshire: John Moyes, M.D., to be Acting Surgeon (dated Nov. 12th, 1887).—18th Middlesex: Acting Surgeon J. E. Lane resigns his appointment (dated Nov. 12th, 1887).

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.—The autumn general meeting will be held at 49, Berners-street, Oxford-street, on Wednesday next, the 23rd inst. The chair, to be taken at 5 P.M., will be occupied by the President, Sir Thomas Crawford, K.C.B. The Council will report further proceedings with reference to the exclusion of those holding Irish medical degrees and the higher diplomas of the K.Q.C.P.I. and of the R.C.S.I. from English hospital appointments. The Association dinner will take place at the Holborn Restaurant at 7 P.M. the same evening, Sir Thomas Crawford in the chair.

Correspondence.

"Audi alteram partem."

THE DISCUSSION ON CARDIAC MURMURS.

To the Editors of THE LANCET.

SIRS,—Permit me to correct a misunderstanding of my remarks at the Medical Society of London last Monday. I am reported to have said that I differed from Dr. Gairdner as to the mode of production of the murmur which is pathognomonic of mitral stenosis. I wished to assert, on the other hand, that I entirely agreed with Dr. Gairdner's explanation of the cause of the murmur. My valued friend knows this full well, for I have had the advantage of his co-operation in examining patients manifesting the murmur in my wards in the London Hospital. Our only difference, as I tried to make clear at the Medical Society, is on the point of nomenclature. I object to the term "auricular-systolic" as applied to the murmur, because it seems to define that the systole of the auricle is *alone* the cause of the sound, whereas we are agreed that this may be produced anteriorly to the auricular contraction. I prefer the term "presystolic," because I could connote by this a murmur commencing not with but after the second sound, and occupying the whole or any part of the long pause until the succeeding first sound. I am, Sirs, yours truly,

A. ERNEST SANSOM, M.D.

Harley-street, Cavendish-square, W., Nov. 12th, 1887.

"IS CANCER CONTAGIOUS?"

To the Editors of THE LANCET.

SIRS,—In 1864, when practising in Nottinghamshire, I was consulted by a labouring man, in middle life, suffering from extensive epithelioma of the lower lip, which eventually caused his death. He always attributed the cause of his complaint to drinking daily out of the same vessel as his father, who died a year previously from epithelioma of the lip. This, if nothing more than a coincidence, is momentarily interesting.

This is the only instance that has ever come under my notice which would support the theory of cancer being contagious. I am, Sirs, yours truly,

Manchester, Nov. 12th, 1887. WALTER WHITEHEAD.

"HEMIPLEGIA DURING THE PUERPERIUM."

To the Editors of THE LANCET.

SIRS,—After reading the interesting case by Dr. S. Sloan in THE LANCET of Oct. 1st, I looked over my scribbling note-book, and found the following note, which you may think might interest your readers:—

Mrs. F—— was delivered by a nurse. The delivery was natural and easy, notwithstanding that ten days previously she had a row, and, I heard, a stand-up fight with one of her female neighbours. The child dying suddenly on the fourth day brings me on the scene with a coroner's order to report on the probable cause of death, which was from natural causes. There was nothing out of the way to draw my attention to the mother, but three days after I am asked to see her, and find her in a semi-conscious state, her hand to her head complaining of pain, bosom swollen and hard, bowels costive, lochia flowing. Under ordinary treatment these symptoms cleared up; but on my usual visit on the seventh morning, I again find her semi-conscious, her mouth drawn to the right side, her left arm and leg quite paralysed, and no control over either bladder or bowel. Here my note ends, for soon afterwards she was removed to the workhouse, and I know after some months she returned home able to do her household duties. Her previous history is this: Always subject to epileptic fits; this was her second child; no fits either during or after labour; parents never "very clever." In this case you will see the hemiplegic symptoms did not show themselves until the fourteenth day after confinement. As to her heart, I believe that was and is quite healthy.

I am, Sirs, yours truly,

Ashburton, Devon, Nov. 9th, 1887. WILLIAM FRASER, M.B.

SCARLET FEVER; SECOND ATTACK.

To the Editors of THE LANCET.

SIRS,—On October 10th I sent a child to the Fever Hospital with scarlatina, well-marked symptoms, sore throat, and scarlet efflorescence on wrists. The patient was returned from the hospital as cured a few days ago, and on Nov. 6th I was called to see the patient, who, I found, was suffering from a second attack, and consequently I had to order the patient to be sent to the hospital a second time, which I should consider rather an unusual occurrence. If you consider it to be so, perhaps you would insert this in your valuable journal. I am, Sirs, yours truly,

Nov. 8th, 1887. M.R.C.S.

*** Such cases as the above are undoubtedly rare. In THE LANCET of July 21st, 1883, a somewhat similar case was reported as occurring in the Leeds Fever Hospital, under the care of Dr. Barrs.—ED. L.

THE PROFESSION AS A CALLING *v.* QUACKERY. THE CORPORATIONS AS GUARDIANS OF PROFESSIONAL INTERESTS.

To the Editors of THE LANCET.

SIRS,—It is with wonder that I read from week to week, in your valuable journal, the numbers of men entering the medical profession or commencing their studies, lectures, hospital practice, &c., at the various schools. I ask myself, Have these men well considered what they are doing? Have they sat down and counted the cost of time, study, and pecuniary outlay? If so, for what? I am a general practitioner, with an average income from my practice. I am an M.D. of a university; this gives a status if you have money. I am a surgeon; a "bone-setter" near me gets larger fees and better income. I am an apothecary; a chemist close by visits and prescribes. It may be thought by these young men that the universities, colleges, or examining boards, who derive large incomes from fees &c., will protect their rights, interests, &c. I never heard of their so doing. I therefore say to these men, Think twice before you endeavour to enter the profession for a living, when you can practise with equal success as a quack, without the expenditure of your capital, time, and brains. Such is the advice of one who is looked upon as a well-to-do, successful REGISTERED PRACTITIONER.

November, 1887.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

TYNEMOUTH INFIRMARY.

AT a meeting to promote the erection of a hospital for the borough of Tynemouth, and presided over by Mr. H. S. Donkin, M.P., it was mentioned that the project was in a fair way of being realised, but that £1000 were still wanted to complete the erection. The chairman mentioned that a gentleman in the borough had promised him £250 of the amount provided the balance was raised in six months. Before separating the meeting pledged itself to raise the necessary sum within six months.

YOUNG CHILDREN IN A WORKHOUSE.

At a late meeting of the Auckland guardians, co. Durham, the very large number of young children in the workhouse was commented upon. A guardian had counted nineteen children in arms, and thought they should, as guardians, prevent the workhouse being turned into a lying-in hospital.

A SHIELDS BATHER'S RECORD.

Mr. Joseph Pollard, swimming master, South Shields, has completed ten years of sea bathing. With the exception of forty mornings, he has bathed continuously. The actual number of dips for the ten years was 3612, and in walking to and from the seaside for these baths Mr. Pollard has travelled 6772½ miles. The omissions were caused by illness, brought on by Mr. Pollard's attempt to swim from New-

castle to Shields, in August, 1884. Mr. Pollard still continues his bathing, and although well advanced in years he is in excellent health.

DEATH OF MR. WILLIAM CARR AND DR. J. C. MURRAY, LATE OF NEWCASTLE.

I regret to notice the rather sudden death of Mr. William Carr, M.R.C.S., of this city, which took place on Nov. 7th. He was in his seventy-sixth year, and was one of our oldest general practitioners. He was a pupil of the late Sir John Fife, and had been in active practice in Newcastle for half a century. He was a widower, and had also the misfortune to lose two sons by death, who were fully qualified and assisted him in his practice, which at one time was an important one, but of late years he mostly restricted his services to his old friends who remained as patients. Mr. Carr has left one daughter as his sole survivor. He was very active when in good health, and did a large amount of work outside his profession as churchwarden &c. He also contested a vacant coronership with much spirit a few years ago, and, although not successful, he earned the gratitude of the profession, for it is well understood that it was the principle rather than the emoluments of the office he fought for. Mr. Carr's health had been evidently failing for some time, but he got about up to the day of his death. I saw him on that day in the forenoon at the Exchange News Rooms. Soon afterwards, it appeared, he was taken ill in the streets, and, hailing a hansom, was driven home, where he was enabled with help to recline on a sofa. His neighbours, Drs. Embleton and Stainthorpe, were speedily on the spot, but found that their friend had passed away from syncope.—Dr. John Cass Murray, who had been many years in practice in Newcastle, also died last week at Stranraer, where he had retired from active practice a few years ago owing to failure of health. Dr. Murray was one of the founders of the Chest Hospital in this city; he was a ready writer, and, as well as being a regular contributor to the medical journals, he published a very successful *brochure* on the Use and Abuse of Tobacco, which has had a large sale, and was very favourably reviewed by the medical journals as a treatise; but his views as to the advantages of tobacco in chest diseases were peculiar, and will hardly be adopted by the profession. Dr. Murray, who was in his fifty-fifth year, has left a widow and grown-up family of four daughters and one son.

Testimonials of respect have been given by friends and patients to Drs. Rennie of Callercoats and Paxton of Norham. The latter received a jubilee gift, having practised in Norham for a period of fifty years.

Newcastle-on-Tyne, Nov. 15th.

EDINBURGH.

(From our own Correspondent.)

HEALTH SOCIETY LECTURES.

THE first of the annual series of Health Lectures for the People was delivered by Dr. T. S. Clouston last Saturday night. Taking as his subject, "How pleasant Surroundings and Conditions affect Health and Happiness," the lecturer stated, and illustrated by a series of striking instances, the general principle, that whatever outward conditions contribute to growth, strength, and perfection of structure, and promote normal function, tend directly to the production of conscious happiness or to the maintenance of a condition of calm equilibrium, which he terms "organic satisfaction." Using this statement of physiological principles as a text, Dr. Clouston preached an admirable and lucid lay sermon on the gladdening and health-giving powers of sweetness and light; nor was the opposite side of the picture left unpainted, for he describes in realistic colours the sort of life that exists in some of the "dark places of the earth." That tendency of human nature which in pleasant surroundings found its expression in innocent gaiety and enjoyment, was identical with that which, in an opposite environment, was the direct cause of indiscretion and excess, with all their train of crime and misery. Alluding to the law of heredity, he showed how the effects of these gloomy surroundings were implanted in the brain before the child was actually conscious of their objective existence, and he gave an ominous warning of what the effect must be when this is continued generation after generation. In concluding his lecture, which was listened to with marked attention by a large audience of the general public, he drew attention to the good done by open spaces, recreation grounds for various forms of exercise and pastimes, and the importance of making schools, hospitals, and other public buildings as bright and cheerful as may be. While acknowledging that much good has been done in these directions, he urged that with increased knowledge of the importance of such reforms, increased efforts should be made on all hands for their accomplishment.

Edinburgh, Nov. 15th.

DUBLIN.

(From our own Correspondent.)

M'GOVERN'S ALLEGED CURE FOR HYDROPHOBIA.

A CONSIDERABLE number of people believe in the efficacy of M'Govern's treatment, while, on the other hand, those sceptical as to the invariably successful result of the cases treated by this method are not few in number. One of the latter (Dr. Thompson of Omagh), in order to test the matter has recently offered a sum of £50 to anyone who can prove an authentic cure by M'Govern; but up to the present no attempt has been made to claim the money.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The Council will, at a meeting to be held on Thursday, the 17th inst., elect one additional examiner in Pathology, and one additional examiner in Ophthalmic and Aural Surgery, to examine candidates for the conjoint diplomas of the College and the Apothecaries' Hall.

THE COLLEGE OF SURGEONS AND THE APOTHECARIES' HALL CONJOINT SCHEME.

The examinations under this scheme have been unavoidably postponed in consequence of the action of the College of Physicians, who last week lodged a *caveat* against the scheme.

THE DUBLIN MEETING OF THE BRITISH MEDICAL ASSOCIATION.

A sum of £66 3*s.* 10*d.* (including interest allowed by the bank) having been left over all expenses incurred at the recent meeting of the British Medical Association in Dublin, a meeting of the subscribers to the Reception Fund was held last week in order to dispose of the amount. After some discussion the following resolution, proposed by the Registrar-General and seconded by Sir William Stokes, was unanimously adopted:—"That the surplus should be applied to procure a portrait of Dr. Banks, the President of the Association, to be hung in the hall of the King and Queen's College of Physicians, as a memorial of the Dublin meeting of the British Medical Association in 1887, and of the able, courteous, and efficient manner in which he presided over the meeting." A committee has been appointed to make all necessary arrangements in furtherance of the resolution. At the same meeting a vote of thanks was passed by acclamation to Dr. Duffey for the able manner in which he acted as general secretary during the meeting of the Association in Dublin.

HEALTH OF IRELAND FOR SEPTEMBER QUARTER.

The birth-rate for the quarter was 0·1 over the average rate for the corresponding quarter of the past five years, and 0·3 above the rate for the third quarter of 1886. The deaths exceeded those registered in the September quarter of last year to the extent of 1141. Compared with the returns of pauperism furnished by the Local Government Board for the corresponding quarter of 1886, there is a slight increase in the average number of workhouse inmates on Saturdays during the quarter, but a decrease of 6196 in the average number of persons on out-door relief. The Registrars report the presence of the following diseases in their respective districts—viz., small-pox in 3 districts, measles in 37, German measles (rötheln) in 4, scarlatina in 40, whooping-cough in 46, diphtheria in 10, and fever in 43.

SMALL-POX IN DUBLIN.

Sir Charles Cameron, Medical Superintendent Officer of Health, has reported that five cases of small-pox have

occurred lately in Dublin, and in the same district. Brief details of the outbreak are as follows: The first case was that of a girl, who probably received the infection from a sailor, who lodged in the same house, and who had suffered from an eruption. The second was an infant, who had been nursed by the girl above mentioned. Both these cases were admitted to hospital, the infant dying on Nov. 12th. On the 11th inst. a girl sickened with the disease, and two days afterwards a woman was taken ill with it. A fifth case is that of a girl, who is at present under treatment in her own home; and, as she resides in a house occupied by only one family, she cannot forcibly be removed to hospital. It appears that this last case has been going on since Nov. 3rd; yet no report was made of it to the sanitary authority either by the medical attendant or any of the girl's family. This is a fresh illustration of the necessity for the compulsory notification of infectious diseases in Dublin. Sir Charles Cameron points out that the last epidemic of small-pox in Dublin, which caused 2000 deaths, originated in circumstances resembling the present limited outbreak of small-pox. It is intended to issue posters without delay, recommending vaccination, avoidance of contact with people likely to have the contagion of small-pox in their clothing, and the early notification of cases of the disease to the sanitary authority.

THE ABOLITION OF NIGHT LECTURES.

The non-recognition of night lectures after a certain date by the Senate of the Royal University cannot be regarded as a subject for congratulation. As has been pointed out on more than one occasion, some of the smartest medical students in Dublin have attended night lectures — men who were engaged in business during the day, and had not any other time at their disposal. The writer of this has had considerable experience for many years of both day and night students, and can conscientiously affirm that in energy, earnestness of purpose, intelligence, and general good conduct, night students are in no way inferior to their day brethren.

COUNTY GALWAY INFIRMARY.

The Governors will appoint a resident surgeon to this institution on the 10th prox., at an annual salary of £100, with residence &c.

MERCER'S HOSPITAL, DUBLIN.

The inquiry into the charges brought against the senior surgeon, Mr. E. Stamer O'Grady, M.B., F.R.C.S.I., has been adjourned till the 28th inst.

Dublin, Nov. 15th.

PARIS.

(From our Paris Correspondent.)

HYPNOTISM IN PARIS.

THE experiments related by M. Luys some time back at the Academy of Medicine, which were reported in your columns, are repeated frequently at the Charité Hospital, and continue to draw crowds. The lecture theatre is now too small for all the *badauds* who throng to see the wonderful Gabrielle and the no less celebrated Esther, but the world at large is kept *au courant* with the performances by frequent articles in the public press. If the phenomena observed in the unfortunate creatures who are trained into a state of cunning insanity, and who, like Gabrielle, have passed nearly all their lives in hotbeds of hysteria, only were in question, it would still be profoundly humiliating for the profession in general to see the ridiculous comedy now played passed off upon the unscientific public as an advance in medicine. But matters of far wider importance are at issue. Medico-legal experts here have recently acquitted a shop-lifter because she could be hypnotised. There was auto-suggestion, and, consequently, irresponsibility. Professor Brouardel, whose position as dean of the faculty of medicine makes his utterances almost official, has discussed at length both in his lectures and in the medical press (*Gazette des Hôpitaux*) the possibility of the consummation of rape in hypnotised girls, and fully admits it, a conclusion which has been accepted by the Medico-Legal Society. By all means let us have the truth. If past experience be false, which has over and over again unmasked the trickery of these mesmerised, magnetised, or hypnotised subjects, let the question be reopened and examined dispassionately and scientifically, but let the experiments be surrounded with the necessary safeguards to make them an exact test. I for one am convinced that the action of medicine *à distance* would fail under these circumstances, and little would remain of hypnotism beyond perhaps the induction of nervous sleep. But if responsibility is in reality a delusion, and virtue no defence against lust, the sooner our prejudices in these matters are swept away the better. THE LANCET has before this exposed frauds and delusions of the kind, but never was an independent inquiry more needed than at present.

THE ACTION OF MEDICINES *à distance*.

It may be remembered that the experiments upon hysterical patients, with different medicines in sealed tubes, performed by M. Luys, and to which such a notoriety has been given by the press, were originated by MM. Bourru and Burot. The first-named gentleman has been endeavouring to obtain a repetition of these interesting phenomena before an unbelieving public, and has signally failed in the attempt. Speaking at the Société de Thérapeutique, M. Constantin Paul said that he had placed at M. Bourru's disposal a most sensitive subject, upon whom he was allowed to act without any extraneous influence. With a bottle of alcohol *uncorked*, and evidently smelt by the patient, staggering was produced. In another instance, a bottle supposed to contain cherry-laurel water produced effects usually caused by this drug, but it was discovered that the chemist had made a mistake (?), and that the bottle contained water only. Five or six other experiments gave results of the same value. M. Bucquoy said that he was afraid the Commission appointed by the Academy would throw but little light on the question. He could, however, affirm that those of his colleagues and the *internes* with whom he was acquainted were convinced that M. Luys had been imposed upon. M. Voisin, at the Medico-Psychological Society, attributed the results to suggestion. Upon applying an *empty* tube to the neck of one of his subjects, and leading her to suppose it contained alcohol, she immediately showed signs of intoxication. The characteristic effects of other drugs were produced in succession, the patient thinking they were applied, whereas the empty tube was each time substituted. Two months later the experiments were repeated, M. Voisin remarking that the patient would be able to distinguish the drugs from one another. As before, an empty bottle was used, but the therapeutic effects of the drugs were again witnessed, and *in the same order*. Further comment is unnecessary.

NAPHTHOL AS AN ANTISEPTIC.

The antiseptic properties of naphthol have been known for a long time, but owing to the supposed toxicity of this substance, its employment has been till now limited to the local treatment of certain affections of the skin. At a recent meeting of the Academy of Sciences, Professor Bouchard stated that, after two years of research, he has been able to determine and measure the antiseptic power of naphthol as well as its toxic power, and he has been led to conclude that, in certain circumstances, it is to be preferred to all the antiseptics known, owing to its very feeble solubility. To disinfect a surface easily accessible, the soluble antiseptics suffice, and the same should be employed to effect general antisepsia, but none has as yet been found that can be introduced into the blood in sufficient quantity to destroy the vitality of the microbes without compromising the health or life of the patient. To produce antisepsia in the thickness of the tissues, or in that of cavities reached with difficulty, where continued drainage cannot be practised, the insoluble antiseptics, or those only partially soluble, can alone be employed with advantage. They should be preferred for the interstitial treatment of certain maladies of the tissues, for the antisepsia of serous cavities, and particularly for the antisepsia of the digestive tube, which the author has had especially in view in his researches. The explanation on which the advantage of an insoluble antiseptic is founded is that from the fact of its insolubility it is unabsorbable; it will therefore be found present throughout the length of the digestive tube, and can be administered in sufficient quantity to render all fermentation impossible, without having to fear its general action on the economy, into which

its insolubility would prevent its penetrating. It was for these reasons that Professor Bouchard preferred the salicylate of bismuth and iodoform; and Rossbach also, when he employed naphthol for intestinal antisepsia. After having tested the antiseptic property of naphthol in certain microbian maladies, Dr. Bouchard found that in a solution of 33 centigrammes to one litre of diluted alcohol the naphthol very much retarded the development of the bacillus of typhoid fever, as well as the germination of the bacillus of tuberculosis. Urine, shaken up with naphthol in powder, then filtered and exposed to the air, does not ferment. According to Dr. Bouchard, the dose of naphthol which may be considered toxic for a man weighing 65 kilogrammes is about 250 grammes. Two and a half grammes of naphthol per day suffice to procure intestinal antisepsia; the author therefore concludes that the toxic power of this substance has been very much exaggerated, though there can be no doubt that a solution introduced into the organism directly through the veins would prove far more dangerous.

SULPHO-BENZOATE OF SODA IN THE DRESSING OF WOUNDS.

At a subsequent meeting of the Academy of Sciences, Dr. H. Heckle, of the Naval Hospital of Toulon, read a note on the results he obtained by the employment of the sulpho-benzoate of soda in the dressing of wounds. These results have been so satisfactory that the author considers this agent as being far superior to all the antiseptics now in vogue, without having any of the inconveniences inherent to them.

DIPHTHERIA AMONGST SOLDIERS.

Since the army surgeons brought to notice the frequency of diphtheria in the French army, particularly among cavalry regiments, Dr. Longuet has studied the subject, and in a paper read before the Academy of Medicine he has arrived at the following conclusion as to the etiology of the disease: "It is incontestable that, not only in the French army, but in the German army, the cavalry, though less numerous than the infantry, furnishes three times more cases of diphtheria. It is equally certain that at Paris, for example, the most active foci of this cruel malady are, on the one hand, the largest of the cavalry barracks, and, on the other, a hospital situated near one of the most important stables belonging to the omnibus company; and, as the cause of the malady could not be traced to the water, nor to the straw, nor yet to the horses, it appears conclusive that it must exist in the manure."

FIRE AT THE ÉCOLE PRATIQUE.

A fire broke out yesterday morning at the École Pratique de Médecine which caused considerable damage. It originated in the laboratory of Dr. Charles Richet, Professor of Physiology, by the over-heating of a gas stove. As the laboratory contained a number of different kinds of essences, these contributed in a great measure to increase the force of the fire, and the whole place was in a blaze in a few minutes, and were it not for the active assistance rendered by the firemen considerable damage might have resulted to the neighbouring buildings. By a curious coincidence, a banquet was arranged for yesterday evening by his pupils to Dr. Charles Richet, son of the eminent Professor of Clinical Surgery at the Hôtel Dieu, who had just been nominated Professor of Physiology at the Paris Faculty of Medicine.

Paris, Nov. 16th.

PROFESSOR MOLESCHOTT ON THE UNITY OF SCIENCE.

(From our Correspondent at Rome.)

THE Roman University began its winter session on the 3rd inst. with a discourse from the Professor of Physiology, Dr. James Moleschott. The great hall of the Sapienza was crowded in every part, and the lecturer was supported on the platform by a distinguished attendance of men of science, of letters, and of public affairs. On such occasions Moleschott, whether addressing a mixed audience or one composed of medical students only, never fails to acquit himself with ability and effect; and his inaugural address was so fully equal to expectation that, by general desire, it will be printed and published for the edification of circles far beyond that of academic Rome. His purpose being to demonstrate the unity of science and the harmony of its various sections, he passed in review the whole array of the *scibile*, setting in relief the reciprocal relations of its components, and leading up to the organic total or harmonious synthesis (*sintesi armonica*). This forms the science of sciences, the true philosophy of the modern time. Before it disappear the artificial classifications, the premature "systems," to give place to a chain whose "continuity" knows no "solution," and of which each individual science is but a link. Palæontology, for example, has given its hand to embryology, to weave again the evolution of living organisms, always more specialised and more complex, but springing from the unbroken series of the transformations and specialisations of organ and function. So the circle of life closes in death, in which again life, like a new Phœnix, finds the germs of another birth. The value of each science in its bearing on general progress was thereafter estimated, the palm being given to mathematics as formulating the True in the rigorous exactness of Number, while in the infinitely various multiplicity of geometrical forms it furnishes to art the eternal principles of the Beautiful. Metaphysics, he continued, created the axiom, which modern science repudiates, as she repudiates "innate ideas." But if metaphysics no longer creates the *scibile*, she gives organic form to the truths ascertained by analysis and generalises their laws, vouchsafing to science that method which is the foundation of inductive research. Besides, in metaphysics lies the basis of ethics, which, soaring to the serenity of the ideal, gives its hand to æsthetics, to form the sublime triad of Plato, the True, the Good, and the Beautiful. No man of science, continued Moleschott, can nowadays isolate himself in a specialty; each of us has need of the aid of the cognate sciences. The physician may no longer seek the causes of disease in the mere influences of the atmosphere, or in the disorders of the passions; but to-day he finds an unexpected auxiliary in botany, which reveals in the ultimate categories of vegetable life the sporules of the lowest parasitic fungi, which are the determining cause of maladies without number. Hence he prepares the human organism through hygiene to resist those enemies to health by denying them the soil in which they germinate. Proceeding to anthropology, which embraces all the manifestations of life, Moleschott dwelt on it by way of transition to the moral sciences, and to politics, which subsists on statistics, up to the social sciences, which, studying society as a living organism, prepare, step by step, the solution of the great questions in which lies the amelioration of the condition of the labouring classes. Scientific progress, concluded Moleschott, has two implacable enemies—ignorance and pessimism. But in the dark one is afraid of a statue, and pessimism has only the courage of despair. Now, "he who despairs," says the poet, "does not work." Only he who works carries in his own conscience the fruit and the guerdon of his life. Loud and continuous plaudits greeted the lecturer as he resumed his seat—the reference to the obscurantist horror of the proposed statue to Giordano Bruno (a "reformer before the reformation," who was burnt for heresy in the Campo dei Fiori) evoking rounds of cheering from the students, with whom the commemoration of Bruno originated. Moleschott, as an accomplished scholar, particularly profound in his knowledge of Dante, as a proficient physiologist, and as an able consultant, has long mastered the secret of charming a cultured audience. His discourse was a brilliant success, and cannot fail in its printed form to give equal delight to still more extended circles than that of his adopted compatriots.

PRESENTATIONS.—Dr. Blomfield, physician to the Exeter Dispensary, on resigning the house-surgeoncy of the Devon and Exeter Hospital, which he held from 1881 to 1887, has recently been presented with a silver teapot, cream-jug, and sugar-basin on an oak tray, by the nurses and servants of the hospital. The teapot bears the following inscription:—"Presented, with a sugar-basin and cream-ewer, to Arthur George Blomfield, Esq., M.D., House-Surgeon of the Devon and Exeter Hospital from 1881 to 1887, as a token of esteem, from the nurses and servants. October, 1887."—Mr. Paxton, of Norham, has been presented with an illuminated address, a carriage clock, and a purse of sovereigns by over 300 of his patients and friends, on his completion of fifty years practice in that village.

Obituary.

JAMES GREY GLOVER, M.B., C.M.
(OF SUNDERLAND.)

GRADUATES of the University of Edinburgh of two or three years' standing will be sorry to hear of the very early death—at twenty-three—of Mr. James Grey Glover, M.B. and C.M. Edin., at Las Palmas, Grand Canary, on Nov. 9th. This feeling will not be unshared by many of the professors to whom his faithful work and bright and genial character were known. To his own family the event is fraught with a great sadness, at once mitigated and enhanced by the memory of his nature and his promise. Shortly after graduating in Edinburgh, in 1885, which he did with honours, Mr. Glover studied for some months at the London Hospital. Thereafter he took an assistantship at Barry, near Cardiff, which he had to relinquish in December of last year, on account of chest symptoms, for which he took a voyage to India, without advantage. He was distinguished in the University for his ability at play as well as work being among the foremost at cricket, football, cycling, &c. On two occasions he rode from Edinburgh to Sunderland in one day on his bicycle, a distance of 120 miles. He was bent on trying the effects of Las Palmas, but it is only fair to say that his disease was far advanced, and his friends did not share his hopes of the results of the experiment. Mr. Glover was the second and only surviving son of Mr. Terrot Glover of Sunderland, and nephew of Dr. Glover of London.

CHARLES FRANKLIN, M.R.C.S., L.S.A.

IT was with sincere regret that the numerous friends of Mr. Charles Franklin heard of his sudden death on the 4th inst., from heart disease. This occurred at Brighton, where he had been staying for a few days in order to recruit his health. The third son of Henry Franklin, Esq., he was born in Kingston, Jamaica, on Oct. 4th, 1842, and when eight years of age came with his brother to England, and was placed under the care of the late Rev. E. Trimmer of Putney. Afterwards he went to Tonbridge School, where he was under the tuition of Dr. Welldon. He then entered as a student at Guy's Hospital, taking the M.R.C.S. in 1863, and the L.S.A. in the following year. In a few months' time he went into practice at Ingatestone, in Essex, where he remained for more than eleven years. In 1876 he entered into partnership with Dr. Wyman of Putney. After their dissolution of partnership, which took place this year, he took as partner Mr. John Gay. Although he had not enjoyed good health for some time, the sudden and fatal termination of his illness was unexpected, and the announcement of his death caused great and widespread grief in the places where he was known. Kind, sympathetic, and unsparing in his devotion to his patients, he was much beloved by them. Skilful as a practitioner, his very presence in the sick room inspired confidence, whilst his known uprightness and honourable character made him trusted even in other than medical subjects. In order to mark their appreciation of Mr. Franklin, his patients and friends propose placing a monument to his memory in Putney Cemetery.

JOHN IRVINE, M.R.C.S.

MR. JOHN IRVINE, whose death recently took place at Tarves, was born in 1807. He obtained his professional education at Aberdeen, and in 1828 became a member of the Royal College of Surgeons of England, his examiners for that diploma being John Abernethy, Sir A. Carlisle, and Sir Astley Cooper. He then commenced practice at Tarves, and for many years was one of the leading medical men in the Buchan district. He was one of the oldest members of the Aberdeen Medico-Chirurgical Society, a member of the North of Scotland Medical Association and the Garioch Medical Society, and a member of the original Spalding Club. Mr. Irvine also held a commission as Justice of the Peace, and the respect in which he was held by his medical brethren was shown eight years ago in a complimentary dinner given him on his completing his fiftieth year of practice.

Medical News.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At examinations recently held the following obtained the Fellowship of the College:—

William Berry, Wigan. | Patrick Joseph MacNamara.

THE annual Hospital Sunday collection was made at Bootle on the 13th inst.

AN outbreak of measles has occurred in several towns in North Wales, and the schools in many districts have been closed on account of the epidemic.

ROYAL FREE HOSPITAL.—A concert was given at this hospital on Friday last, Nov. 11th, for the amusement of the patients, under the direction of Mr. O. H. Bamberger. The entertainment was a great success from beginning to end.

THE wife of a working man residing in Birmingham gave birth on the 7th inst. to twin boys, joined together in a most remarkable manner. The infants are reported to be well, but their bodies are so connected that separation would cause instantaneous death.

FATALITY AT A FOOTBALL MATCH.—An inquest was held at St. Helens, on Nov. 15th, on the body of William Edward Taylor, who died from injuries received whilst playing football. The jury returned a verdict that deceased came by his death accidentally.

SANITARY INSTITUTE OF GREAT BRITAIN. — At an examination, held on Nov. 10th and 11th, sixty-two candidates presented themselves—eight as local surveyors, and fifty-four as inspectors of nuisances. Of the former three, and of the latter thirty-one, obtained certificates of competency.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—At a meeting to be held in the rooms of the Medical Society of London on Tuesday, Nov. 22nd, at 4 P.M., Dr. Richardson, F.R.S., will preside and deliver a short address. A paper will be read by Dr. J. J. Ridge on "Alcohol, its Substitutes and Alternatives."

THE steamer *Grosvenor* arrived off Liverpool on the 11th inst., having had fatal cholera on board during her passage from Calcutta. She was allowed to pass the Suez Canal "in strict quarantine." As the result of Dr. Stopford Taylor's inspection she was allowed to enter the dock, and no restrictions were placed on her crew.

ROYAL MEDICAL SOCIETY OF EDINBURGH. — The following have been elected office-bearers:—Presidents: W. A. Turner, M.B., C.M.; G. O. C. Mackness, B.A., M.B., C.M.; H. F. Waterhouse, M.B., C.M., M.R.C.S.; E. H. Ezzard, M.B., C.M. Secretaries: Robert Abernethy and L. A. W. Beck. Chairman of Finance Committee: A. L. Gillespie. Chairman of Library: P. B. Haig. Curator of Museum: F. D. Boyd.

SOCIETY FOR THE STUDY OF INEBRIETY.—Under the auspices of this Society two lectures will be delivered at the rooms of the Medical Society of London: the first on Nov. 23rd, by Dr. George Harley, F.R.S., on the "Action of Moderate Drinking on the Human Constitution; Alcoholic Stimulants as a Bane and Antidote in the Sick Room"; the second on Nov. 30th, by Dr. Norman Kerr, on the "Various Forms which Inebriety may assume."

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At a meeting of the members of this Association, on the 11th inst., Dr. Kenyon in the chair, Dr. Barr submitted a plan and section of a new apparatus for the abatement of smoke for factory chimneys. It showed a method of applying the steam jet automatically, and, besides efficiently abating a smoke nuisance, the appliance economised fuel. Dr. Adams read a paper on Outbreaks of Measles, Scarlatina, and Diphtheria in Runcorn. A discussion followed, in which Drs. Vacher, Hope, Welsh, and the chairman took part.

DONATIONS.—At a meeting of the weekly board of the Wolverhampton Hospital, held on Nov. 15th, the chairman (Lieut.-Colonel Thorneycroft) announced that he had received from Mr. W. F. Fryer, of London, the handsome sum of £500 as a donation toward the endowment fund of the institution. A vote of thanks was unanimously accorded to Mr. Fryer for his generous gift.—Mr. Gervas Lennox Taylor has given £50 to the Meath Hospital, Dublin.

BEQUESTS.—The late Right Hon. Edward, first Baron de Ramsey, who died on Aug. 9th last, has bequeathed £1000 to the Huntingdon County Hospital, £200 each to the Norfolk and Norwich Hospital, the Hunstanton Convalescent Home, the Royal Hospital for Incurables, Putney, and the Hospital for Consumption, Fulham; and £100 to the Norwich Eye Infirmary.—The late Miss Mary Fothergill of Hensol Castle has bequeathed £500 to the Cardiff Infirmary.

THE HOME FOR INVALID LADIES AT SAN REMO.—Her Imperial Highness the Crown Princess of Germany lately visited the Home for Invalid Ladies at San Remo, of which institution she has been patroness for several years. Her Imperial Highness expressed herself as being much pleased with the arrangements and surroundings of the home, and made some practical and useful suggestions. Dr. Freeman of San Remo had the honour of being presented to the Princess.

FATAL ACCIDENT TO A SURGEON.—A profound sensation has been created in the town and neighbourhood of Wellingborough, Northamptonshire, by a fatal accident to Mr. Arthur D. Gripper, a young surgeon of that place, on Monday evening. About 6 P.M. two working men were going down the walk on the London road, when they met a riderless horse galloping towards the town. Suspecting that something was wrong, they made a search, and found Mr. Gripper lying by the side of the road, unconscious, but moaning. They conveyed him to a neighbouring house, and medical aid was called in. An examination showed that Mr. Gripper had sustained concussion of the brain, and, though every effort was made to save his life, he died before midnight. He had been out on his rounds when he met with his accident, but how it arose cannot be stated with certainty, though he appears to have been dragged a considerable distance with one foot in the stirrup. Deceased, who was a native of Ware, in Hertfordshire, and thirty-two years of age, came to Wellingborough about four years ago as assistant to Dr. Heygate, afterwards entering into partnership with that gentleman. He was very popular with all classes, and his untimely death has cast a gloom over the town. At the inquest on Wednesday a verdict of "Accidental death" was returned.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ATTWATER, ARTHUR WILLIAM, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Whickham Urban Sanitary District.

BABST, CHAS. THEODORE UVO, L.R.C.P.Ed., L.R.C.S., has been reappointed Medical Officer of Health for the Howdon Urban Sanitary District, Northumberland.

BROWN, JOHN, L.R.C.P.Lond., L.S.A., has been reappointed Medical Officer of Health for the Bacup Urban Sanitary District.

CADDY, ARNOLD, M.R.C.S., L.R.C.P.Lond., has been appointed House-Surgeon to the North Lonsdale Hospital, Barrow-in-Furness, Lancashire, vice F. Edge, resigned.

CALDERWOOD, GEORGE, M.D.Univ.Glas., has been reappointed Medical Officer of Health for the Egremont Urban Sanitary District.

COSENS, W. BURROUGH, L.R.C.P. Lond., M.R.C.S., has been appointed House-Surgeon to the Taunton and Somerset County Hospital, vice G. W. Rigden, resigned.

FOWLER, WALTER, M.A., M.B., F.R.C.S.Eng., has been appointed Registrar and Pathologist to the Central London Throat and Ear Hospital, vice G. W. Hill, M.B., resigned.

LUSH, PERCY J. F., M.A., M.B., B.S.Oxon., M.R.C.S., has been appointed House-Surgeon to the West London Hospital.

MONTGOMERY, SAMUEL, L.R.C.P.Ed., L.R.C.S., has been reappointed Medical Officer of Health for the Ovenden Urban Sanitary District.

PATERSON, WM. BROGDON, M.B., C.M.Edin., has been appointed Medical Officer to the Beaufort-street Dispensary, Liverpool.

PIGGOTT, CECIL H., B.A., M.B., B.C. Cantab., M.R.C.S., has been appointed Medical Officer of Health for the Teignmouth Urban and Port Sanitary Districts, vice Lake resigned.

SHELSWELL, WILLIAM ARTHUR, L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Hornton District of the Banbury Union, Oxfordshire, vice S. D. MacVicar, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

SMITH, CHARLES CALLOW, M.B. Cantab., M.R.C.S., has been reappointed Medical Officer of Health for the Redditch Urban Sanitary District.

VON WINCKLER, WILLIAM J., M.R.C.S., L.R.C.P. Lond., L.S.A., has been appointed Out-patient Assistant at University College Hospital.

WINSLOW, L. S. FORBES, M.B., LL.M.Camb., D.C.L.Oxon., M.R.C.P. Lond., has been appointed Physician to the North London Hospital for Consumption and Diseases of the Chest.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon. Salary £100 per annum, increasing by £10 per annum to £150, with furnished apartments, board, and attendance.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth. — Resident Medical Officer. Salary £80 per annum, with board and residence.

BURTON-ON-TRENT INFIRMARY. — House-Surgeon. Salary £130 per annum, with a prospect of increase, and rooms, coals, and gas free.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's-inn-road, W.C. House-Surgeon.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian-road, N.—Obstetric Physician to Out-patients.

HOME AND INFIRMARY FOR SICK CHILDREN, Lower Sydenham.—Second Honorary Assistant Physician.

PADDINGTON-GREEN CHILDREN'S HOSPITAL.—House-Surgeon. Salary £80 per annum, and rooms.

PARISH OF ST. LEONARD, Shoreditch. — Resident Assistant Medical Officer for the Workhouse and Infirmary. Salary £100 per annum, increasing £10 annually to £120 per annum, with rations, furnished apartments, and washing in the Infirmary.

PEWSEY UNION.—Medical Officer for the Third District. Salary £63 Also for the Fifth District. Salary £40. For each midwifery case £1 will be paid.

ST. GEORGE, HANOVER-SQUARE, PROVIDENT DISPENSARY, Little Grosvenor-street, W.—Resident Medical Officer. The salary and allowances last year were £235 8s.

STOCKPORT INFIRMARY.—Assistant Medical Officer. Salary £50, with board and lodging.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea.—House-Physician. Honorarium £50 per annum, and board and lodging in the hospital.

WALLASEY DISPENSARY.—House-Surgeon. Salary £120 per annum, with furnished residence, coals, and gas.

Births, Marriages, and Deaths.

BIRTHS.

BATTYE.—On the 13th inst., at Denbigh-street, S.W., the wife of John Howard Battye, M.D., of a son.

CHANING-PEARCE.—On the 8th inst., at Montague House, St. Lawrence-on-Sea, the wife of J. Chaning-Pearce, M.D., of a daughter.

FARNELL.—On the 13th inst., at The Goffs, Eastbourne, the wife of Henry D. Farnell, F.R.C.S., of a son.

MORRIS.—On the 9th inst., at Gordon Lodge, Charlton-road, Blackheath, S.E., the wife of Clarke Morris, M.R.C.S., L.S.A., of twin daughters.

MORSE.—On the 30th ult., at Torrington, N. Devon, the wife of Edward Morse, L.R.C.S., L.R.C.P.Ed., of a son.

POLAND.—On the 11th inst., at St. Thomas's-street, London-bridge, S.E., the wife of John Poland, F.R.C.S., of a son.

RAKE.—On the 25th ult., at Mucurapo, Trinidad, the wife of Beaven Rake, M.D.Lond., J.P., Medical Superintendent of the Trinidad Leper Asylum, of a daughter.

THOMPSON.—On the 7th inst., at Suffolk-place, Sevenoaks, the wife of Herbert Thompson, M.R.C.S., of a daughter.

TWEEDY.—On the 16th inst., at 100, Harley-street, W., the wife of John Tweedy, F.R.C.S.Eng., of a son.

MARRIAGES.

FLIGG—BORTON.—On the 8th ult., at St. George's Cathedral, Grahamstown, South Africa, by the Lord Bishop of the Diocese, assisted by the Rev. Canon Wharton B. Smith, William Fligg, M.B.Edin., son of the late Wm. Fligg, of Scarborough, to Marion Teresa, elder daughter of the late Captain Henry Martin Borton, Royal Artillery.

WALTON—BARTON.—On the 12th inst., at St. Jude's, South Kensington, Arthur Walton, M.S., M.B., to Emily, elder daughter of George Kingston Barton, M.D., F.R.C.S., of Fulbeck, Lincolnshire.

DEATHS.

CARRUTHERS.—On the 3rd inst., at Denbie House, Lockerbie, Dumfriesshire, John Hetherington Carruthers, of Denbie, late Surgeon, Royal Navy, aged 82.

FIRTH.—On the 6th inst., at St. Giles' Plain, Norwich, Eustace Firth, M.D., aged 31.

HUGMAN.—On the 13th inst., at 27, Alma-square, St. John's-wood, William Curtis Hugman, F.R.C.S., late of Guildford-street, Russell-square, after a few days' illness of inflammation of the lungs, in his 72nd year.

MORRIS.—On the 11th inst., at Gordon Lodge, Blackheath, Mabel Annie, aged 2 days, twin daughter of Clarke and Mabel Morris.

SMART.—On the 14th inst., at his residence, 6, Cecil-street, Greenheys, Robert Bath Smart, Surgeon, late of 176, Oxford-road, Manchester, aged 59.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, November 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Ferrier: Some cases in illustration of Cerebral Hemianæsthesia.—Mr. J. Knowsley Thornton: Two cases of Cholecystotomy.

Tuesday, November 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. J. Warrington Haward: A case of Excision of a Tubercular Movable Kidney.—Dr. Archibald E. Garrod: A Contribution to the Theory of the Nervous Origin of Rheumatoid Arthritis.

Wednesday, November 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Herman: On Delivery by the Vagina in Extra-uterine Pregnancy.—Dr. Champneys: On Primary Laparotomy (that is, abdominal section in the latter half of pregnancy, the child being alive) in cases of Extra-uterine Gestation.—Dr. John Williams: A case of Extra-uterine Pregnancy in which Abdominal Section was performed during the life of the Fœtus at the Thirty-fifth Week of Gestation. Specimens bearing on the above subject only will be shown.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Conversazione.

SOCIETY OF ARTS.—8 P.M. Prof. Silvanus P. Thompson: The Mercurial Air-pump.

HUNTERIAN SOCIETY.—8 P.M. Mr. Fowler: A case of Richter's Hernia.—Dr. Savage: Proposed Lunacy Legislation as affecting Medical Men.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M.—Specimens will be shown by Drs. Edis, G. Granville Bantock, Mansell-Moullin, and others. Mr. J. Bland Sutton: The Nature of the Hymen.—Dr. E. Holland: Electrolysis of Uterine Fibroids.—Dr. Bedford Fenwick: On the Use of Bloodletting in Gynæcological Practice. Council, 8 P.M.

Thursday, November 24.

ST GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, November 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Gibbons and Mr. R. W. Parker: Case of Removal of Tumour from the Female Bladder by the Galvano-écraseur, Rapid Dilatation of Urethra, combined with Supra-pubic Incision.—Dr. Clemow: Case of Hysterical Hyperpyrexia.—Dr. Barlow: On a case of Acute Enlargement of the Thyroid Gland.—Mr. R. C. Lucas: The Congenital Absence of an Upper Lateral Incisor Tooth as a Forerunner of Harelip and Cleft Palate (with cases). Living Cases:—Mr. J. H. Makins: A Synovial Cyst in connexion with the Shoulder-joint.—Dr. J. B. Ball: A case of Chorea, with Embolism of a Retinal Artery.

Saturday, November 26.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, November 17th, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 11	30·00	N.E.	43	42	65	49	42	...	Overcast
,, 12	30·21	N.E.	43	42	60	46	42	...	Overcast
,, 13	30·09	E.	42	39	...	45	38	...	Overcast
,, 14	29·73	N.E.	42	40	57	45	39	...	Overcast
,, 15	30·14	N.E.	36	34	45	39	33	...	Hazy
,, 16	30·40	N.E.	29	...	...	34	27	...	Foggy
,, 17	30·16	E.	28	...	...	35	25	...	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE Publisher is much obliged to several correspondents for calling his attention to the admission to the advertising columns of THE LANCET of an advertisement which, in so far as this journal is concerned, is of an eminently objectionable character. It was received with others from a very respectable agent in the ordinary way, and by some means escaped critical attention.

VACCINATION WITH CALF LYMPH.

WE lately referred to a case of alleged injury from the use of calf lymph. The father of a child who had been vaccinated at the Animal Vaccine Establishment had written to the *Echo* asserting that his child had suffered from a serious eruption as the result of the operation. This eruption was, however, as we stated, due not to vaccination, but to the administration of bromide of potassium; and we commented on the action of the father in addressing a letter to the public press without mentioning that he had been fully informed of the circumstance that had led to his child's illness. He now writes to us that he does not believe the rash was due to bromide of potassium, because of its limitation to the legs and arms of his child, and because of its prolonged duration. As a result of inquiry, we learn that the child was seen by a number of the medical staff of St. Thomas's Hospital, as well as by the medical officers of the Vaccine Establishment, and that no difference of opinion exists as to the nature of the eruption.

Mr. T. W. J. Allen.—1. Special assistance would be required if no more dissecting were done.—2. Yes.—3. No. They are not on the same footing.—4. Quain's or Gray's Anatomy, Foster or Landois's Physiology, Bell, Nicholson, or Huxley on Comparative Anatomy.

Mr. P. P. Griffith.—The Surgical Aid Society, Salisbury-square, or Surgical Appliance Society, Finsbury-circus.

Mr. Buss (Leominster).—Very shortly.

PHYSICAL EXERCISE FOR A HEMIPLEGIC PATIENT.

To the Editors of THE LANCET.

SIRS,—Perhaps some of your readers know of a tricycle or other machine with mechanism contrived so as to allow pedal and manual exercise for a patient suffering from slight hemiplegia? My object is to enable my patient to have open-air exercise, with the satisfaction accompanying locomotion by his own effort. The principal invalid-chair manufacturers have been communicated with without result.

I remain, Sirs, yours truly,

Aylesbury, Nov. 11th, 1887. R. HARVEY HILLIARD, M.D.

"CHANGE OF AIR."

IN reference to a question on the above subject which appeared in our last issue, we are reminded that the matter is discussed at length in the second chapter of Dr. Lindsay's work on "The Climatic Treatment of Consumption," published by Macmillan.

T. H. S. (Plymouth).—Alchemy, according to Prof. Crum Brown, had its origin in two ancient arts, pharmacy and metallurgy. The pharmaceutical goal was the elixir of life, the "universal medicine," which, if taken *secundum artem*, ensured perfect bodily health for ever. The metallurgic goal was the philosopher's stone, a substance which if mixed with a large quantity of lead turned it into gold.

Sangrado.—Our correspondent might consult Dr. Oscar Jennings' paper on the subject, published in THE LANCET of June 25th last; also Considérations sur le Traitement de la Morphinomanie, Bulletins de l'Académie de Médecine, March, 1887.

Dr. Groom (Wisbech).—We shall be pleased to receive the abstract for consideration.

X. Y. should consult a medical practitioner.

"SEA-SICKNESS."

To the Editors of THE LANCET.

SIRS,—The subject of sea-sickness periodically appears in your correspondence columns, and remedies are recommended and theories advanced as to its causation. No doubt many of the remedies have been proved by practical experience to do good, and we are gainers by being told of them. But it is doubtful if so much can be said of the theories. No theory can be considered a satisfactory one which will not explain why sickness is not, as a rule, caused by horse riding, carriage and railway travelling, swinging, and other jolting or swaying conditions to which the body may be subjected. And a trustworthy theory must explain why custom to the sea gives immunity to sea-sickness, and why some persons never suffer from it. I would suggest yet another theory, which is absolutely useless as suggesting a means of cure or relief. To those who are sceptical as to the relief or curability of sea-sickness this uselessness may, perhaps, be in favour of the theory. It is that giddiness is produced by the unusual motion, and that sickness follows sympathetically, "the stomach sympathising with its dear friend, the brain," as a famous "grinder" used to say. Doubtless, after a time, in some cases, from much vomiting irritability of the stomach is set up, and we have those very severe cases in which the patients are brought to death's door and have to be landed at the nearest port of call to save their lives. On board ship the unusual motion which one cannot, as it were, feel a reason for, though one knows that it is caused by waves; the way in which objects that should be perpendicular are constantly moving out of the perpendicular; the heaving up and subsidence of the deck; and the rolling waters outside—all these conspire to make one giddy. Some people become sick in swings, in trains and carriages, especially with their backs to the engine or horses. The moving ground and surrounding objects in the case of the swing, the flying trees, hedges &c. in travelling—movements all the more odd when one is going backwards—tend to cause giddiness. What giddiness is physiologically, and why some people are more easily made giddy or sick, I cannot pretend to say. Many persons will become sea-sick on board a large steamer who do not suffer in a small boat, or even in a sailing ship. It is possible that the mind is better able to realise the surroundings and "the reason why" of the motion in the smaller vessels than in the huge steamer, which, apparently, ought to be immovable, but is not. No doubt, to a person whose head is beginning "to go round," the smells common to steamers may give the *coup-de-grâce* and make him sick, when otherwise he might have escaped with a feeling of giddiness and discomfort. I would therefore suggest that in the case of those who get over sea-sickness custom cures the giddiness caused by the unwonted motion; while those who never suffer from sea-sickness are endowed with unsympathetic stomachs, or are not easily made giddy. Most persons who escape sea-sickness suffer from a feeling of giddiness and discomfort for the first day on board ship. My excuse for now speaking of myself is that I am one of the lucky few who escape sea-sickness, and my immunity has been proved by many voyages. I have generally suffered from an uncomfortable giddy feeling for the first day on large ocean steamers; once in a high-sided surf boat, from which I could see nothing but sky and distant sea; in this latter case the sky and the horizon and the boat heaved up and down in a most unintelligible manner, and made me very giddy.

A not uncommon symptom among those who are going to be sea-sick is an uncomfortable feeling, or even pain, in the perineum; this I have felt in a swing. Those whose imaginations make them sea-sick on board a vessel moored in smooth water do not, I think, form evidence against this theory of giddiness, for every medical man has had equal proof of what imagination can do.

I am, Sirs, yours faithfully,

Oct. 19th, 1887. VERTIGO.

EXHIBITIONS IN EPSOM COLLEGE.

To the Editors of THE LANCET.

SIRS,—Allow me to supply an omission in my letter of last week. All applications relating to the examinations for these exhibitions must be sent in on or before December 1st.—Yours faithfully,

Reigate, November, 1887. C. HOLMAN, M.D., Treasurer.

A JUDGE'S RESPECT FOR MEDICAL SERVICES.

WITH reference to the want of appreciation of the value of medical men's services displayed by Belgian courts of justice a story is related by a correspondent of a Belgian medical journal of a provincial judge whose decisions were habitually in favour of patients who disputed their doctors' bills and of quacks who infringed on doctors' practices. A time came when sickness invaded the judge's house, and he was obliged to have the doctor—or, rather, a succession of doctors, for he went from one to another till he had called in nearly all the local members of the profession—constantly in the house. These all demanded a fee of ten francs at every visit. The judge's purse not being a long one, he was terribly distressed, and at last applied to an old friend who was a medical man, practising, however, at a distance. This friend made inquiries amongst his professional brethren, and found that the local medical association had passed a resolution that the judge should be taught a little more respect for medical services by being charged ten francs a visit—not, as it would seem to us in this country, a very exorbitant fee for a man in the position of a county-court judge to be expected to pay.

Surgeon J. E. Wusk, M.S.—We understand that Mr. Pepper will deliver an address before the Metropolitan Branch of the British Medical Association in the early part of 1888, on "Medical Witnesses—their Duties and Remuneration"; and that this will be published in pamphlet form, with a reprint from THE LANCET of his lectures on "Practical Legal Medicine."

A Subscriber.—We cannot give our correspondent further information than that contained in our advertising columns.

F. M.—We are not aware that the article has appeared in print.

Mrs. I. White.—We are unable to accept the offer.

Dr. W. P. Watson.—We cannot exchange.

LARYNGEAL SPASM WITH ASSOCIATED NERVE SYMPTOMS.

To the Editors of THE LANCET.

SIRS,—Being somewhat at a loss to know how to continue the treatment in the undermentioned interesting case, I should esteem it a great favour if any of the readers of your valuable journal could advise me what to try, and who have found benefit, especially if permanent, to their patients, as the one I am treating is too frequently still a sufferer from these peculiar attacks.

The patient is a healthy, robust-looking woman, aged twenty-five, the mother of two children. She was married at the age of twenty, and, except for these attacks, enjoys excellent health. Since the age of sixteen she has been at varying, though frequent, intervals suddenly seized, usually after meals, with considerable difficulty in breathing, almost amounting to imminent asphyxia, this being associated with a sucking sound. At the same time urticaria rapidly developed itself, often from head to foot, with intense irritation, whilst her features are greatly distorted. She does not lose consciousness, nor altogether the power of speech. The pulse is quickened and small, the breathing being laboured and also quickened. Vomiting sometimes supervenes, giving the patient more or less speedy relief. Otherwise it generally takes, according to the severity of the attack, from twenty minutes to half an hour to recover the breathing. I have tried the following remedies with marked benefit, but still not with, as yet, any permanent relief:—Anti-dyspeptics, nux vomica, bromide of potassium, arsenic, and general tonics; and at the time of attacks ether, chloroform, hot sponges to the throat, ozone papers, and stimulants.

I am, Sirs, yours very truly,

Nov. 15th, 1887. M.B.

WATER-TIGHT CASES.

To the Editors of THE LANCET.

SIRS,—If Messrs. Mayer and Co. had taken the trouble to read the description of our "Patent Water-tight Cases," it would have saved your valuable space and our time in replying to the letter which appeared in your issue of the 12th inst. What we principally claim is not the metal grove or tongue, but the covering of porpoise hide, thereby rendering the case impervious to moisture (the groove, or tongue, is likewise covered with the same material). Messrs. Mayer and Co.'s verdict of superiority is somewhat premature. Considering they have never seen one of our cases, we fail to see how their verdict has been arrived at.

We are, Sirs, your obedient servants,

London, Nov. 15th, 1887. ARNOLD AND SONS.

STROPHANTHUS.

To the Editors of THE LANCET.

SIRS,—As specimen pods of a species of strophanthus different from that which is in general use are being offered to the medical profession and to materia medica museums, we beg to say that having on hand about 10 lb. of pods of the genuine drug as now employed in medicine we shall be happy to present a specimen for any museum of materia medica or to any medical man who may write for the same. We are also willing to supply, without charge, seed or tincture for experimental purposes to any physician or institution desiring the same.

We are, Sirs, yours very respectfully,

BURROUGHS, WELLCOME, AND CO.

Snow-hill-buildings, E.C., Nov. 10th, 1887.

A CORONER'S INQUEST IN THE COUNTRY.

To the Editors of THE LANCET.

SIRS,—Will you kindly insert this letter in your valuable journal, showing what a farce a coroner's inquest may be, and hoping something may be done to rectify the matter by making it publicly known in the medical press, since it has failed in the daily newspapers.

On Thursday last (Nov. 4th) I was called to see J. G——, a lad of eighteen years of age, who was a farm servant. When I arrived at the farm (7 A.M.) I found the patient dead. It appears he had not felt well for some days previously, but had not sought medical advice, and he did his work as usual on Wednesday. On calling him to get up in the morning he made no response, whereupon they opened the door of his room and found him in a dying condition in bed. A messenger was sent off at once for my principal, who despatched me. An inquest was held next day, but I have not heard the verdict of the jurymen, neither did I receive any intimation from the coroner to make a post-mortem examination or to attend the inquest. I am told it is not the first case by any means that has happened in this manner, and the coroner is no doubt complimented in the way in which he cuts down the expenses. Is this justice? I enclose my card, trusting that I have not trespassed too much on your space.

Believe me, Sirs, yours sincerely,

Nov. 8th, 1887. JUSTITIA.

STRUMOUS ULCERS.

To the Editors of THE LANCET.

SIRS,—If any of the profession could suggest anything for the following case I would be much indebted to them. I have at present under my care a girl, about nineteen years of age, who is in good health, except that all round her neck, chin, and both sides of her face she has large scrofulous sores, and all the lymphatic glands of those parts are enlarged, and in many places undergoing caseous degeneration. The glands at the base of the ulcers have been scraped, and after that, under dressing of red wash, they healed. But they will not keep healed. As soon as an ulcer has healed the scar will keep all right for two days. Then a few minute yellow pustules appear here and there upon it. If these are pinched, a little unhealthy fluid escapes and dries into a scab, beneath which unhealthy ulceration rapidly goes on. If they are left alone, the pustules rapidly enlarge and burst, the fluid dries into scabs, beneath which ulceration rapidly goes on, and coalesce with others, until the whole scar is broken down again. Under proper dressing the ulcer will again heal, to again break down in the same way. This goes on week after week, and month after month, in spite of the greatest care, the most careful dressing, and the most varied treatment, both internally and externally. I am, Sirs, faithfully yours,

November 14th, 1887. M.B.

WHAT MUSCLES ACCOUNT FOR IT?

To the Editors of THE LANCET.

SIRS,—I would like the opinion of some of your physiological readers on the following facts.

My paternal grandfather, who died at eighty-eight, had all his life the power to eject food or fluid from the stomach at will, at any time. My father, who is eighty-one, always had the same gift. So have I, who am forty-nine. When a medical student I have—stupidly, I admit—often swallowed for a wager large doses of narcotic poisons diluted in water, merely retiring for a few seconds immediately after. There is not the slightest difficulty in the act, and, of course, no nausea. I frequently wash out my stomach in the morning with two or three successive tumblerfuls of cold water, and feel fresher after it; and if at any time troubled with acidity, dilution and ejection are naturally suggested. Now, what voluntary muscles account for this? Could not physiological experiments be made on the Beaumont principle? Not that I want to go in for them; but there must be many similar cases.

I am, Sirs, yours truly,

Nov. 9th, 1887. M.D., C.M.

THE LANGMORE DEFENCE FUND.

THE Secretary of the above fund, Mr. G. Bastes, acknowledges the receipt of one guinea, sent by Surgeon-Major Stanley L. Dobie, 4th Madras Cavalry, Kamptee, India.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Coats, Glasgow; Sir J. Paget, London; Mr. W. Whitehead, Manchester; Dr. Whittle, Brighton; Mr. C. S. Rose, London; Mr. C. Mackie, Port Glasgow; Mr. T. Holmes, London; Dr. Voight, Southport; Mr. R. Clarke, London; Dr. Moir, St. Andrews; Mr. F. G. Smith, Liverpool; Dr. Lucas, Gibraltar; Mr. Wilkinson, Birkenhead; Dr. Oscar Jennings, Paris; Mr. A. E. Taylor; Dr. McCaw, Belfast; Drs. Silk and Goodhart, London; Mr. C. E. Jones, Watford; Dr. Finlayson; Dr. Groom, Wisbech; Dr. Hilliard, Aylesbury; Messrs. Burroughs and Wellcome, London; Mr. B. Casse, Bournemouth; Messrs. Barnes and Co., New York; Dr. Abraham, London; Mr. Heale; Dr. Holmes, Southam; Dr. Sansom, London; Dr. Whitla, Belfast; Mr. Borham, Fulham; Mr. Raven, Broadstairs; Dr. Cheadle, London; Dr. G. Thompson, Stapleton; Messrs. Warren, Bristol; Messrs. Tillotson and Son, Bolton; Mr. G. Kelly, London; Mr. Maw, Bradford; Mr. Van Praagh, London; Dr. Stallard, Manchester; Messrs. Faulkner and Co., Manchester; Dr. Branthwaith, Rickmansworth; Messrs. W. and A. K. Johnston, Edinburgh; Mr. Brown, Brompton; Messrs. Lee and Nightingale, Liverpool; Mr. Andrew, Stockport; Messrs. Allen and Hanburys, London; Mr. Sangster, Lambeth; Dr. Tennant, Ben Rhydding; Mr. Thomas, Pwllheli; Mr. Mercs, London; Dr. Norman Kerr, London; Mr. Lamby, Epsom; Mr. Tuye, London; Mr. Adolphe Smith, Rome; Mr. Anderson, Gipsy-road; Messrs. Drysdale and Co., Montreal; Dr. Pollock, London; Dr. Allwright; Messrs. Squire and Co., London; Mr. Ingzet, Bethnal-green; Messrs. Smith and Son, Birmingham; Mr. Buckby, Nottingham; Messrs. Reynolds and Branson, Leeds; Mr. Hartley, Thirsk; Mr. Tailer; Messrs. Orridge and Co., London; Dr. Taylor, Nottingham; Messrs. Burgess and Co., London; Mr. Cox, London; Mr. Forsyth, Glasgow; Dr. T. F. Pearse, London; W.; W., Marlow; M.B.; Tinea Favosa; One of the Members' Deputation; G. P.; H. J.; A Subscriber to THE LANCET since 1868; M.D., Maidenhead.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Ellis, Swansea; Mrs. Vincent, Hampstead; Dr. Prowle; Messrs. Blake and Co., Leeds; Mr. Cremonine, Auckland, N.Z.; Messrs. Isaacs and Co., London; Mr. Heap, Liskeard; Dr. Daly, Glasgow; Mr. Morris, Blackheath; Mr. Robinson, Sunderland; Mrs. Adams, St. Leonards-on-Sea; Mr. Barnet, Kennington; Mr. Miller, Lochlade; Mr. Vokes, Birmingham; Mr. Teesdale, Bossington; Mr. Hind, York; Mr. Davies, Pontypridd; Mr. Murray, Queenstown; Mr. Cuthbertson, Rhondda; Mr. Arnold, Hastings; Mr. Good, Dorchester; Messrs. Hopkinson and Co., Nottingham; Messrs. Mahomed, London; Messrs. Eason and Son, Dublin; Capt. Pead, Dulwich; Mrs. Wilson, Bristol; Dr. Ridge, Enfield; Mr. Watkins, Newport; Mr. Allsop, Shipley; Dr. Beaman, Newton-le-Willows; Messrs. Matthews, Birmingham; Dr. Thomas, Sheffield; Dr. Oscar, Bournemouth; Mr. Ware, Kensington; Mr. Hine; Dr. Martin, Bermondsey; Dr. Oswald, Clapham; Mr. Brearley, Batley; B. G. S. L.; G. E. J.; Tenax, Guildford; Medicus, Scole; House Surgeon, Bath; Medicus, Northampton; A. B. C., Wanstead; Medicus, Stow-on-the-Wold; Medicus, York; B.; A. B. C.; Surgeon, Lower Broughton; D. C., Manchester; J. C. A.; Matron, Bedford; H. A., London; Spiro; Dalston; Fides, New-cross; M.D., Kinston; X.Y.M., King's-cross; Sphenoid, Shap; Myrtus.

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